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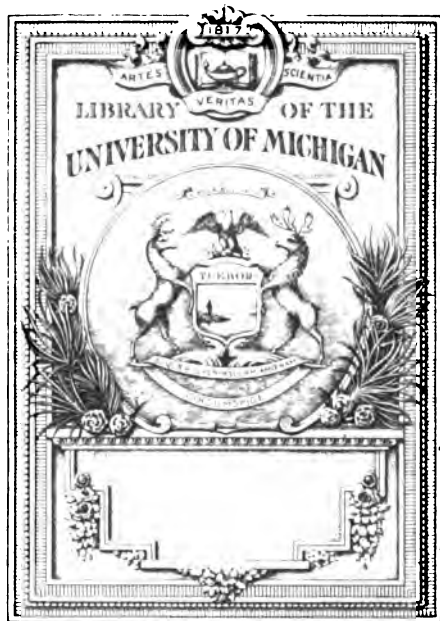
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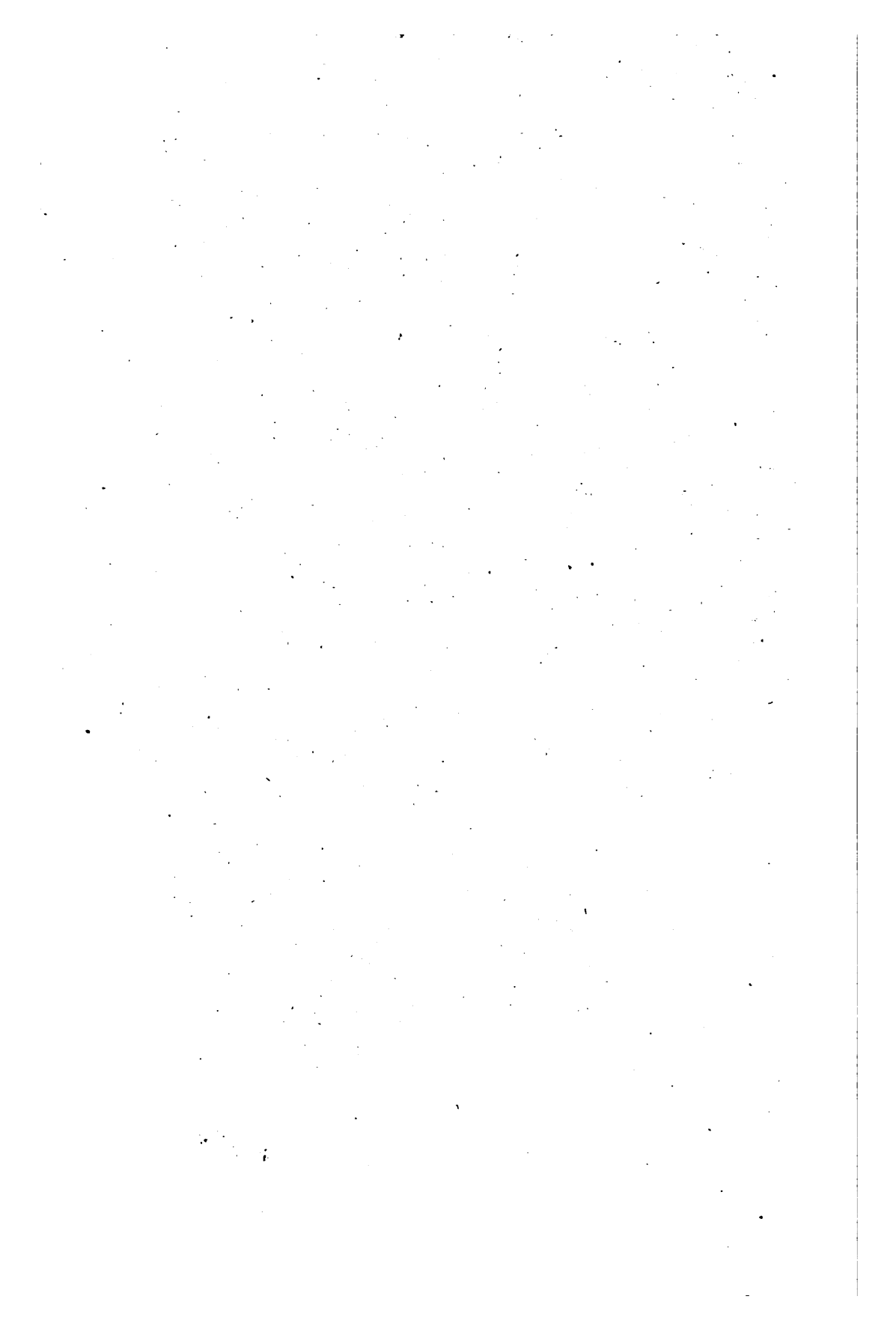
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ANNUAL REPORT
OF THE
PUBLIC WORKS DEPARTMENT

FOR THE
YEAR 1916

COMPLIMENTS OF

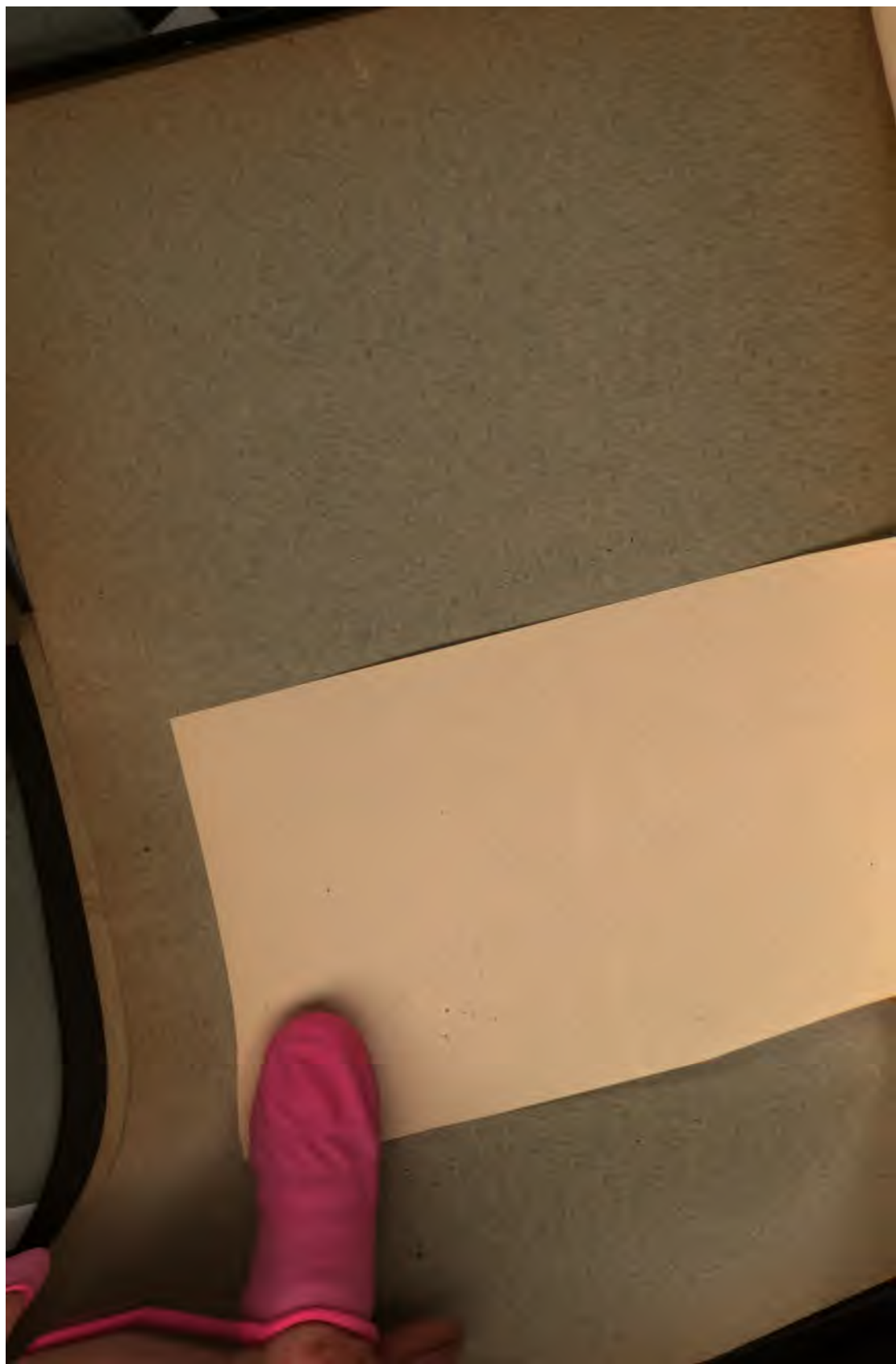
EDWARD F. MURPHY,

Commissioner of Public Works

PLEASE EXCHANGE

CITY OF BOSTON
PRINTING DEPARTMENT
1917

Dup. 18
D. of D.



ANNUAL REPORT
OF THE
PUBLIC WORKS DEPARTMENT
FOR THE
YEAR 1916



Dup. 18
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CITY OF BOSTON
PRINTING DEPARTMENT
1917

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CONTENTS.

PART I.

REPORT OF THE COMMISSIONER OF PUBLIC WORKS.

| | PAGE | | PAGE |
|--------------------------------|------|------------------------------|------|
| Appropriations..... | 2 | Offal..... | 38 |
| Appropriations, special..... | 4 | Paving and regulating.... | 34 |
| Contracts: | | Pumping station, Calf Pas- | |
| Artificial stone sidewalks | 26 | ture..... | 51 |
| Artificial stone walls, steps, | | Sewerage works..... | 42 |
| etc..... | 36 | Sheet asphalt pavement.. | 30 |
| Ashes..... | 38 | Snow and ice..... | 41 |
| Asphalt pavement..... | 30 | Strandway and old harbor | 23 |
| Bituminous macadam.... | 35 | Water pipes, laying..... | 52 |
| Bridge work..... | 21 | Water pipes, relaying.... | 57 |
| Catch basins, cleaning | | Watering carts..... | 40 |
| same..... | 41 | Employees..... | 80 |
| Electric lighting..... | 24 | Expenditures..... | 16 |
| Excavating and grading.. | 34 | Expenditures, by items, seg- | |
| Ferry work..... | 22 | regated budget..... | 12 |
| Filling..... | 35 | Financial statement..... | 16 |
| Gas, furnishing same.... | 24 | General review..... | 7 |
| Gas, lighting streets with | | Maintenance, comparative | |
| same..... | 24 | table..... | 17 |
| Granite block pavement.. | 34 | Organization..... | 1 |
| Hired teams..... | 20 | Organization, chart of (be- | |
| In force, made in previous | | tween pages 84, 85)..... | |
| years, Sanitary Service | 39 | Pavements, area of..... | 60 |
| Macadam, bituminous.... | 35 | Pavements, changes in.... | 63 |
| Miscellaneous, Paving | | Pavements, length of..... | 62 |
| Service..... | 37 | Pavements, miles of..... | 61 |
| Miscellaneous, Sanitary | | Property, personal..... | 64 |
| Service..... | 39 | Property, real..... | 67 |
| Miscellaneous, Sewer Serv- | | Rainfall..... | 59 |
| ice..... | 50 | Revenue..... | 18 |
| Miscellaneous, Water Serv- | | Snowfall..... | 59 |
| ice..... | 58 | Street mileage..... | 61 |

PART II.— APPENDIX A.

| | |
|--|----|
| Administration expenses, Central Office..... | 87 |
|--|----|

APPENDIX B.

REPORT OF THE DIVISION ENGINEER OF THE
BRIDGE AND FERRY DIVISION.

(BRIDGE SERVICE.)

(PAGE 88.)

| | PAGE | | PAGE |
|--|------|---|------|
| Ainsworth street footway... | 101 | General review..... | 88 |
| Air tanks, changes in..... | 114 | Income..... | 100 |
| Appropriations, special..... | 96 | List of Bridges: | |
| Appropriations, special, summary of..... | 99 | In charge of Bridge and Ferry Division, Bridge Service..... | 114 |
| Bridges, work done on: | | In charge of Bridge and Ferry Division and Park and Recreation Department..... | 116 |
| Broadway Bridge..... | 103 | In charge of Park and Recreation Department, Maintained by Metropolitan Park Commission.. | 118 |
| Charlestown Bridge..... | 103 | Maintained by railroad corporations..... | 119 |
| Chelsea Bridge..... | 104 | Of which Boston maintains the part within its limits..... | 116 |
| Chelsea Bridge North.... | 105 | Of which Boston maintains the wearing surface..... | 117 |
| Chelsea Bridge South.... | 105 | Of which Boston pays a part of the cost of maintaining..... | 117 |
| Congress Street Bridge... | 106 | Organization..... | 88 |
| Dorchester Avenue Bridge | 106 | Recapitulation of bridges... | 120 |
| Dover Street Bridge..... | 106 | Recommendations..... | 90 |
| Gove Street Footbridge... | 106 | Repairs on bridges..... | 94 |
| Huntington Avenue Bridge..... | 107 | Small bridges or culverts.... | 121 |
| Morton Street Bridge..... | 108 | Tides, highest and lowest recorded..... | 126 |
| Northern Avenue Bridge | 108 | Width of bridge openings... | 122 |
| Spring Street Bridge..... | 108 | Work done..... | 88 |
| Summer Street Bridge.... | 112 | | |
| Warren Bridge..... | 113 | | |
| Wordsworth Street Footbridge..... | 113 | | |
| City base, elevations and datum..... | 125 | | |
| Drawtenders' report..... | 124 | | |
| Elevations, city base..... | 125 | | |
| Expenditures..... | 92 | | |
| Expenditures, special appropriations..... | 96 | | |
| Expenditures, special appropriations, summary of.... | 99 | | |
| Financial statement..... | 92 | | |

CONTENTS.

v

(FERRY SERVICE.)

(PAGE 128.)

| | PAGE | | PAGE |
|--|------|---|------|
| Appropriations | 129 | Expenditures | 129 |
| Appropriations, amounts paid from | 135 | Expenditures (five years)... | 132 |
| Appropriations, special | 135 | Expenditures and receipts since 1858 | 135 |
| Balance sheet | 131 | Ferryboats | 129 |
| Comparative balance sheet (five years) | 134 | Financial statement | 129 |
| Comparison of appropri- ations, receipts and ex- penditures (five years).... | 132 | Receipts at each ferry | 136 |
| Difference in travel between ferries | 137 | Recommendations | 90 |
| | | Ticket statement | 137 |
| | | Total travel on both ferries (six years) | 138 |
| | | Work done | 128 |

APPENDIX C.

REPORT OF THE DIVISION ENGINEER OF THE HIGHWAY DIVISION.

GENERAL REVIEW.

(PAGE 139.)

(LIGHTING SERVICE.)

(PAGE 142.)

| | PAGE | | PAGE |
|---|------|---|------|
| Arc lamps, total cost per lamp per annum | 149 | Incandescent lamps, total cost per lamp per annum .. | 150 |
| Defects | 144 | Lamps, number of, installed during year | 144 |
| Electric lights, number and kind of | 148 | Lamps, discontinued | 144 |
| Electric lights, cost of | 148 | Lamps, repaired and altered | 145 |
| Expenditures | 142 | Number and style of lamps, January 1, 1917 | 146 |
| Financial statement | 142 | Outages on street lamps ... | 146 |
| Gas lamps, number and kind of | 146 | Rebates | 146 |
| Gas lamps, total cost per lamp per annum | 147 | Repairs | 146 |
| | | Revenue | 143 |
| | | Work done | 143 |

(PAVING SERVICE.)

(PAGE 151.)

| | PAGE | | PAGE |
|--|------|---|------|
| Asphalt, cost of patching, ten years: | | Notices..... | 299 |
| Acme..... | 316 | Permits..... | 297 |
| Sicilian rock..... | 310 | Permits, revenue from..... | 298 |
| Seyssel rock..... | 315 | Plans..... | 300 |
| Trinidad Lake..... | 301 | Revenue..... | 180 |
| Summary of..... | 317 | Roadway defects..... | 298 |
| Assessment streets, work done on..... | 157 | Sidewalk defects..... | 298 |
| Bitulithic pavement: | | Smooth pavement, area of.. | 394 |
| Cost of patching, ten years | 318 | Snow and ice removed by contract..... | 295 |
| Summary of..... | 320 | Snow and ice removed by districts by day labor.... | 295 |
| Streets paved with, summary of..... | 395 | Snow, summary of volume and cost of..... | 296 |
| Brick sidewalks, new, by districts..... | 293 | Street numbering..... | 299 |
| Dirt and street cleanings removed..... | 294 | Street openings..... | 297 |
| Edgestones, new, by districts | 293 | Streets: | |
| Electric light poles..... | 300 | Paved with asphalt on concrete base..... | 153 |
| Expenditures, detail of: | | Paved with bitulithic on concrete base..... | 157 |
| Belgrade avenue and Beech street..... | 180 | Paved with bitulithic, summary of..... | 395 |
| Chelsea street, widening.. | 180 | Paved with granite blocks on concrete base..... | 151 |
| Granolithic sidewalks.... | 180 | Paved with granite blocks, maintenance of..... | 396 |
| Highways, making of.... | 180 | Paved with Hassam blocks on concrete base..... | 153 |
| Hyde Park avenue, widening..... | 180 | Paved with wood blocks on concrete base..... | 156 |
| Norfolk street, widening.. | 180 | With smooth pavement, expiration of guaranty | 321 |
| Paving Service..... | 180 | With smooth pavement, summary of..... | 394 |
| Reconstructing and repairing streets by contract.. | 180 | Work done..... | 139 |
| Expenditures, objects of... | 182 | Work done: | |
| Financial statement..... | 180 | By contract, summary of.. | 176 |
| General law, streets..... | 171 | By day labor, summary of | 178 |
| General review..... | 139 | By department force, detail of (between pages 278, 279). | |
| Granite blocks, streets paved with, having a maintenance guaranty..... | 396 | Charged to Belgrade avenue and Beech street, recapitulation of..... | 281 |
| Income..... | 180 | | |
| Macadam streets, maintenance of..... | 292 | | |
| New brick sidewalks, by districts..... | 293 | | |
| New edgestones, by districts | 293 | | |

CONTENTS.

vii

| Work done: | PAGE | Work done: | PAGE |
|---|------|---|------|
| Charged to Chelsea street, widening, recapitulation of..... | 281 | Charged to reconstructing and repairing streets by contract..... | 204 |
| Charged to granolithic sidewalks..... | 189 | Charged to reconstructing and repairing streets by contract, recapitulation of..... | 284 |
| Charged to granolithic sidewalks, recapitulation of..... | 282 | Charged to regular and street improvements appropriations..... | 187 |
| Charged to highways, making of..... | 217 | Charged to regular and street improvements appropriations, recapitulation of..... | 278 |
| Charged to highways, making of, recapitulation of..... | 285 | Charged to special appropriations, recapitulation of..... | 281 |
| Charged to Norfolk street, widening, recapitulation of..... | 281 | | |

(SANITARY SERVICE.)

(PAGE 397.)

| | PAGE | Materials: | PAGE |
|---|------|---|------|
| Appropriations, special..... | 398 | Cost of collecting and disposing of refuse by contract..... | 409 |
| Ashes, collected by contract, number of loads..... | 406 | Cost of collecting and disposing of refuse by day labor (between pages 408, 409). | |
| Carts, capacity of..... | 405 | Final disposition of..... | 408 |
| Carts, number of..... | 410 | Garbage removed (5 years) | 405 |
| Districts..... | 411 | Number of loads collected from February 1, 1912, to January 25, 1917.... | 405 |
| Expenditures, items of..... | 400 | Offal, collected by contract, number of loads.. | 406 |
| Financial statement..... | 397 | Waste and rubbish removed (5 years)..... | 405 |
| Force employed on house dirt and ashes..... | 404 | Refuse collected, detail of (between pages 408, 409). | |
| Force employed on house offal..... | 404 | Revenue..... | 397 |
| Force employed on waste and rubbish..... | 404 | Sanitary districts..... | 411 |
| Horseshoeing..... | 402 | Shops..... | 401 |
| Income..... | 397 | Weight of material..... | 407 |
| Maintenance..... | 397 | Work done: | |
| Materials: | | Charged to Ward street transfer station..... | 398 |
| Amount expended on offal, ashes and rubbish by districts..... | 403 | | |
| Ashes and house dirt removed (5 years)..... | 404 | | |
| Collected by districts..... | 407 | | |

(STREET CLEANING AND OILING SERVICE.)

(PAGE 412.)

| | PAGE | Streets: | PAGE |
|--|------|--|------|
| Cost of watering streets by districts..... | 424 | Area watered and cost per square yard..... | 424 |
| Expenditures, distribution of | 417 | Cleaned, miles of..... | 422 |
| Expenditures, items of..... | 412 | Cleaned, total cost of (between pages 422, 423). | |
| Flushing streets..... | 419 | Swept by machines (between pages 422, 423). | |
| Horses, cost of maintaining.. | 420 | Treated with oil, cost of.. | 423 |
| Horses, distribution of..... | 420 | Water, amount used..... | 424 |
| Macadam streets, cost of oiling..... | 423 | Watered, cost by districts | 424 |
| Push cart patrol by districts | 421 | Watered, total cost by districts..... | 424 |
| Snow work..... | 418 | | |

(SEWER SERVICE.)

(PAGE 425.)

| | PAGE | Expenditures: | PAGE |
|--|----------|---|----------|
| Catch-basins built, charged to sewerage works..... | 448 | Separate systems of drainage, detail of..... | 457 |
| Catch-basins built, charged to separate systems of drainage..... | 462 | Sewerage Works, detail of | 438 |
| Catch-basins built, charged to other sewer construction..... | 454, 463 | Financial statement..... | 427 |
| Catch-basins, cleaned by contract..... | 437 | Horses, cost of maintaining.. | 465 |
| Coal contracts, pumping station (Supply Department)..... | 436 | Land-takings, executions of court..... | 446, 461 |
| Entrance fees, permits and assessments..... | 465 | Manholes, built, charged to sewerage works..... | 447 |
| Executions of court, on account of land-takings.... | 446, 461 | Miles of sewers, February 1, 1917..... | 466 |
| Expenditures: | | Pumping, average cost per million foot gallons..... | 467 |
| Maintenance..... | 428 | Pumping station, Calf Pasture, work done..... | 445 |
| Maintenance, detail of... | 431 | Pumps, Calf Pasture, average lift and duty..... | 468 |
| Maintenance, detail of, recapitulation of..... | 435 | Refuse, removing same from gate house..... | 470 |
| Separate systems of drainage..... | 456 | Regulators, gates, etc., cared for..... | 471 |
| | | Schedule of sewers built to date..... | 466 |

CONTENTS.

ix

| | PAGE | | PAGE |
|---|------|--|------|
| Sewers and surface drains built, charged to separate systems of drainage..... | 457 | Sewers built, charged to sewerage works..... | 439 |
| Sewers built by contract, force account (between pages 438, 439). | | Summary of sewer construction (twelve months)..... | 466 |
| Sewers built by day labor, force account (between pages 438, 439). | | Summary of sewer construction (five years)..... | 467 |
| | | Sludge account..... | 469 |
| | | Work done..... | 471 |
| | | Work in charge of division.. | 425 |

(WATER SERVICE.)

(PAGE 472.)

| | PAGE | | PAGE |
|--|------|-------------------------------------|------|
| Abatements..... | 482 | Main pipe work, maintenance of..... | 498 |
| Applications for new pipes.. | 482 | Meters: | |
| Automobiles, cost of operating..... | 475 | Applied..... | 490 |
| Construction, cost of..... | 479 | Changed..... | 488 |
| Consumption of water..... | 528 | Changes, reasons for..... | 489 |
| Distribution..... | 528 | Condemned..... | 487 |
| Elevators..... | 483 | In service, January 31, 1917..... | 486 |
| Expenditures..... | 472 | Installed..... | 484 |
| Expenditures, detail of.... | 472 | On hand January 31, 1917 | 485 |
| Expenditures, comparison of | 478 | Owned by city..... | 491 |
| Financial statement..... | 472 | Purchased..... | 486 |
| Fire pipes..... | 483 | Repaired..... | 487 |
| Fixtures, number and kind of | 482 | Set..... | 505 |
| Fountains, changed..... | 503 | Meter repairs..... | 506 |
| Fountains, established and abandoned..... | 504 | Motors..... | 483 |
| Fountains, number of..... | 497 | Receipts..... | 472 |
| Fountain repairs..... | 504 | Receipts, comparison of.... | 478 |
| Hydrants, blow-off and reservoir pipes..... | 494 | Reserve fund..... | 475 |
| Hydrant repairs..... | 499 | Revenue..... | 474 |
| Hydrants, total number of, January 31, 1917..... | 495 | Service pipes: | |
| Hydrants, total number and kind of, established and abandoned..... | 499 | Abandoned and plugged.. | 501 |
| Ice for drinking fountains... | 475 | Cost of laying..... | 501 |
| Income and meter branch... | 481 | Cost of laying, detail of... | 502 |
| Main pipe, cost of extension | 512 | Laid and abandoned..... | 500 |
| Main pipe, cost of replacing | 525 | Maintenance of..... | 502 |
| Main pipe line and valves in same..... | 493 | Repairs, cost of..... | 503 |
| | | Total number and length of..... | 496 |
| | | Shops, work done in: | |
| | | Blacksmith..... | 509 |
| | | Carpenter..... | 509 |

CONTENTS.

| | PAGE | | PAGE |
|-----------------------------|-------------|------------------------------|-------------|
| Shops, work done in: | | | |
| Machine..... | 506 | Water pipes, total length of | 493 |
| Pattern..... | 510 | Water posts, established and | |
| Plumbing..... | 510 | abandoned..... | 504 |
| Miscellaneous..... | 511 | Water post repairs..... | 505 |
| Water: | | Water rates, comparative | |
| Average monthly heights | | statement..... | 481 |
| at different stations (be- | | Water, turning off and on... | 482 |
| tween pages 528, 529). | | Waste, prevention of..... | 480 |
| Debt..... | 479 | Work done..... | 480 |
| Sinking fund..... | 479 | | |

APPENDIX C-I.

**REPORT OF THE ENGINEER IN CHARGE OF
THE HIGH PRESSURE FIRE SERVICE.**

(PAGE 529.)

| | PAGE | | PAGE |
|---------------------------|-------------|----------------------|-------------|
| Expenditures..... | 531 | Recommendations..... | 530 |
| Financial statement..... | 530 | Work done..... | 529 |
| Pumping station, proposed | 530 | | |

APPENDIX D.

**REPORT OF THE BOSTON AND CAMBRIDGE
BRIDGE COMMISSION.**

(PAGE 533.)

| | PAGE | | PAGE |
|---------------------------|-------------|-------------------------------|-------------|
| Bridges in charge of com- | | Expenditures..... | 533 |
| mission..... | 533 | Expenditures, distribution of | 535 |
| Draw openings..... | 536 | Recommendations..... | 533 |
| Drawtenders' report..... | 536 | Work done..... | 533 |

DOCUMENT NUMBERS OF ANNUAL REPORTS.

(PAGE 538.)

ILLUSTRATIONS.

| | PAGE | | PAGE |
|---|------|--|------|
| Engine room, sewage pump- ing station, Union Park and Albany streets..... | 439 | High pressure hydrants, di- rect lines from street..... | 529 |
| Sewage pumping station, Union Park and Albany streets..... | 457 | High pressure hydrants, lines into hose wagon guns..... | 531 |

ANNUAL REPORT
OF THE
PUBLIC WORKS DEPARTMENT
FOR THE
YEAR ENDING JANUARY 31, 1917.

BOSTON, February 1, 1917.

HON. JAMES M. CURLEY,
Mayor of the City of Boston:

SIR,— In compliance with the Revised Ordinances, the annual report of the operations and expenses of the Public Works Department for the year ending January 31, 1917, is respectfully submitted. The Public Works Department, created by Ordinances of 1910, chapter 9, now chapter 28 of the Revised Ordinances of 1914, was formed by consolidating the Engineering, Water and Street Departments.

ORGANIZATION.

The work of the department has been carried on during the year with three main divisions, as follows:

Central Office.

Bridge and Ferry Division.
Highway Division.

NOTE.— The Boston and Cambridge Division, so called, is not strictly speaking a division of the Public Works Department, as this work is in charge of a com-

mission of two, one member appointed by the Mayor of Boston and the other by the Mayor of Cambridge, under the provisions of chapter 412 of the Acts of 1904; but because of the fact that the present Commissioner of Public Works is the Boston member of this commission and also because one half of the expenses of this commission is defrayed by the Bridge Service, it is here treated as a division of this department.

APPROPRIATIONS.

The money assigned for the work of the Public Works Department during the year was made available from the following sources:

First: Maintenance appropriation, derived from the income of the city raised by taxation. In December, 1915, the department estimates of the money necessary for the proper maintenance and conduct of affairs of the different services were submitted to the Mayor. For the first time in the history of Boston the estimates were made in segregated form to the Mayor, who made such allowance for each item in the budget as he considered necessary and submitted them to the City Council. The total maintenance appropriations as passed by the City Council and approved by the Mayor are shown below. On another page will be found the total expenditures by each service, for each item in the segregated budget:

| | |
|--|-----------------------|
| Central Office | \$74,725 00 |
| Bridge Service | 312,247 99 |
| Ferry Service | 298,115 75 |
| Lighting Service | 779,491 36 |
| Paving Service | 981,594 54 |
| Sanitary Service | 963,488 76 |
| Street Cleaning and Oiling Service | 677,178 76 |
| Sewer Service | 323,625 20 |
| Water Service | 939,700 16 |
| Total | <u>\$5,350,167 52</u> |

Boston and Cambridge Bridges.*

Second.— Loan inside the debt limit for building new streets assessable on abutting property authorized by chapter 393 of the Acts of 1906. (Paving Service.)

| | |
|---|--------------|
| Amount expended during the year | \$283,644 79 |
|---|--------------|

*Paid by Bridge Service.

Third.— Loan inside the debt limit under the provisions of chapter 426 of the Acts of 1897, as amended by chapter 204 of the Acts of 1908, from which all sewerage works are built, except those in the Charles River Basin watershed. (Sewerage Works — Sewer Service.)

| | |
|-------------------------------------|----------------------------|
| Balance, February 1, 1916 | \$233,535 53 |
| Loan | 600,000 00 |
| Total | <u>\$833,535 53</u> |
| Expended during the year | 560,497 46 |
| Balance, January 31, 1917 | <u><u>\$273,038 07</u></u> |

Fourth.— Loan under the provisions of chapter 383 of the Acts of 1903, as amended by chapter 485 of the Acts of 1907, by chapter 514 of the Acts of 1908, by chapter 612 of the Acts of 1911, and by chapter 348 of the Acts of 1912, which provides that the City of Boston shall in the year 1913 expend \$400,000 and in each of the next four years shall expend \$400,000, to be met by loan inside the debt limit. (Separate Systems of Drainage — Sewer Service.)

| | |
|------------------------------------|---------------------------|
| Balance February 1, 1916 | \$164,793 21 |
| Loan | 400,000 00 |
| Total | <u>\$564,793 21</u> |
| Expended during the year | 490,576 72 |
| Balance January 31, 1917 | <u><u>\$74,216 49</u></u> |

Fifth.— Loan inside the debt limit, under the provisions of chapter 312 of the Acts of 1911, for the installation of a High Pressure Fire Service. (Water Service.)

| | |
|------------------------------------|----------------------------|
| Balance February 1, 1916 | \$243,102 03 |
| Loan | 25,000 00 |
| Total | <u>\$268,102 03</u> |
| Expended during the year | * 63,126 30 |
| Balance January 31, 1917 | <u><u>\$204,975 73</u></u> |

* Total expended to January 31, 1917, \$655,024.27.

SPECIAL APPROPRIATIONS.

Loan inside the debt limit, under the provisions of chapter 661, Acts of 1912, for the widening and laying out of certain streets in Boston. (Paving Service.)

Expended during the year on:

| | |
|---|-------------------|
| Belgrade avenue extension and Beech street widening | \$59 40 |
| Chelsea street, Charlestown, widening | 30 30 |
| Hyde Park avenue, widening | 490 98 |
| Norfolk street, Dorchester, widening | 570 58 |
| Total | <u>\$1,151 26</u> |

ALBANY STREET BRIDGE, FREIGHT TRACKS. (Bridge Service.)

| | |
|------------------------------------|------------------|
| Balance February 1, 1916 | \$421 52 |
| Expended during the year | 46 99 |
| Balance January 31, 1917 | <u>*\$374 53</u> |

BROADWAY BRIDGE, BOSTON AND ALBANY RAILROAD. (Bridge Service.)

| | |
|------------------------------------|-------------------|
| Balance February 1, 1916 | \$3,926 45 |
| Expended during the year | 85 84 |
| Balance January 31, 1917 | <u>\$3,840 61</u> |

BROADWAY BRIDGE, REBUILDING. (Bridge Service.)

| | |
|---|-------------------|
| Balance February 1, 1916 | \$29,072 39 |
| Transferred to other appropriations | 21,042 65 |
| | <u>\$8,029 74</u> |
| Expended during the year | 983 94 |
| Balance January 31, 1917 | <u>\$7,045 80</u> |

BROOKLINE AVENUE BRIDGE. (Bridge Service.)

| | |
|---|--------------------|
| Loan authorized, but not issued, inside debt limit, | \$55,000 00 |
| Expended during the year | 0 00 |
| Balance January 31, 1917 | <u>\$55,000 00</u> |

* Transferred to City Treasury.

PUBLIC WORKS DEPARTMENT.

5

CAMBRIDGE BRIDGE, PAINTING AND REPAIRING. (Bridge Service.)

| | |
|------------------------------------|-------------------|
| Balance February 1, 1916 | \$6,054 45 |
| Expended during the year | 737 10 |
| | <hr/> |
| Balance January 31, 1917 | <u>\$5,317 35</u> |

CENTRAL AVENUE BRIDGE. (Bridge Service.)

| | |
|--|----------|
| Balance February 1, 1916 | \$735 65 |
| Transferred to City Treasury | 735 65 |
| | <hr/> |

CHELSEA BRIDGE NORTH. (Bridge Service.)

| | |
|---|--------------------|
| Balance February 1, 1916 | \$16,867 64 |
| Transferred to Chelsea Bridge South | <u>\$16,867 64</u> |

CHELSEA BRIDGE SOUTH. (Bridge Service.)

| | |
|--|--------------------|
| Balance February 1, 1916 | \$4,199 46 |
| Transfer from Chelsea Bridge South | 16,867 64 |
| | <hr/> |
| | \$21,067 10 |
| Expended during the year | 1,035 18 |
| | <hr/> |
| Balance January 31, 1917 | <u>\$20,031 92</u> |

DOVER STREET BRIDGE. (Bridge Service.)

| | |
|------------------------------------|-------------------|
| Balance February 1, 1916 | \$2,079 13 |
| Expended during the year | <u>\$2,079 13</u> |

FOOTBRIDGE DALTON STREET TO BOYLSTON STREET. (Bridge Service.)

| | |
|--|-------------------|
| Balance February 1, 1916 | \$9,445 00 |
| Transferred to Granite Avenue Bridge | <u>\$9,445 00</u> |

MALDEN BRIDGE. (Bridge Service.)

| | |
|--|--------------------|
| Revenue received from Boston Elevated Rail- way Company | \$57,558 43 |
| Expended during the year | <u>\$57,558 43</u> |

MERIDIAN STREET BRIDGE. (Bridge Service.)

| | |
|------------------------------------|--------------------|
| Balance February 1, 1916 | \$15,152 62 |
| Expended during the year | 0 00 |
| | <hr/> |
| Balance January 31, 1917 | <u>\$15,152 62</u> |

SPRING STREET BRIDGE. (Bridge Service.)

| | |
|------------------------------------|--------------------------|
| Balance February 1, 1916 | \$5,427 37 |
| Revenue | 1,500 00 |
| Total | <u>\$6,927 37</u> |
| Expended during the year | 5,287 95 |
| Balance January 31, 1917 | <u><u>\$1,639 42</u></u> |

SUMMER STREET BRIDGE, over New York, New Haven & Hartford Railroad. (Bridge Service.)

| | |
|--|--------------------------|
| Balance February 1, 1916 | \$1,862 36 |
| Expended during the year | 362 68 |
| Transferred to City Treasury | <u><u>\$1,499 68</u></u> |

WINTHROP BRIDGE. (Bridge Service.)

| | |
|------------------------------------|--------------------------|
| Balance February 1, 1916 | \$4,466 56 |
| Expended during the year | 0 00 |
| Balance January 31, 1917 | <u><u>\$4,466 56</u></u> |

FERRY IMPROVEMENTS. (Ferry Service.)

| | |
|--|------------------------|
| Balance February 1, 1916 | \$15 60 |
| Transferred from Broadway Bridge | 112 17 |
| Total | <u>\$127 77</u> |
| Expended during the year | <u><u>\$127 77</u></u> |

FERRY SERVICE AUXILIARY LIGHTING PLANT. (Ferry Service.)

| | |
|------------------------------------|--------------------------|
| Balance February 1, 1916 | \$2,000 00 |
| Expended during the year | 225 00 |
| Balance January 31, 1917 | <u><u>\$1,775 00</u></u> |

GRANOLITHIC SIDEWALKS. (Paving Service.)

| | |
|---|---------------------------|
| Balance February 1, 1916 | \$26,227 75 |
| Transferred from Reserve Fund | 25,000 00 |
| Total | <u>\$51,227 75</u> |
| Expended during the year | 16,574 44 |
| Balance January 31, 1917 | <u><u>\$34,653 31</u></u> |

RECONSTRUCTING AND REPAIRING STREETS BY CONTRACT.
(Paving Service.)

| | |
|---|---------------------|
| Appropriated (from taxes) | \$400,513 35 |
| Transferred from Park and Recreation Department | 100,000 00 |
| | <hr/> |
| | \$500,513 55 |
| Expended during the year | 170,650 41 |
| | <hr/> |
| Balance January 31, 1917 | <u>\$329,862 94</u> |

REFUSE DESTRUCTOR SITE SPECTACLE ISLAND. (Sanitary Service.)

| | |
|------------------------------------|--------------------|
| Balance February 1, 1916 | \$15,000 00 |
| Expended during the year | 0 00 |
| | <hr/> |
| Balance January 31, 1917 | <u>\$15,000 00</u> |

REFUSE TRANSFER STATION. (Sanitary Service.)

| | |
|------------------------------------|-----------------|
| Balance February 1, 1916 | \$1,570 16 |
| Expended during the year | 1,298 50 |
| | <hr/> |
| Balance January 31, 1917 | <u>\$271 66</u> |

SERVICE MAINS AND RELAYING MAINS. (Water Service.)

| | |
|------------------------------------|--------------------|
| Balance February 1, 1916 | \$135,014 40 |
| Expended during the year | 47,868 21 |
| | <hr/> |
| Balance January 31, 1917 | <u>\$87,146 19</u> |

STRANDWAY AND OLD HARBOR IMPROVEMENT. (Bridge Service.)

| | |
|--------------------------------------|-----------------------|
| Loan inside the debt limit | \$599,000 00 |
| Expended during the year | 5,124 42 |
| | <hr/> |
| Balance January 31, 1917 | <u>* \$593,875 58</u> |

GENERAL REMARKS.

By appointment of his Honor the Mayor, a committee of experts drew up a program of different kinds of permanent pavement to be laid. This program

* The cost of sewerage works on this work is charged to the appropriation for Sewerage Works.

was put in force during the year and the types of paving adopted and to be followed for future years were as follows:

Class 1. Heavy Traffic Streets.— Granite blocks laid on Portland cement concrete base not less than six (6) inches in thickness, the joints to be filled with Portland cement grout; in the case of excessive grades, pitch to be substituted for grout in the upper inch or so of the joints in order to provide better footing for horses.

Class 2. Main Arteries.— The same type of pavement as Class 1, with a few exceptions where the surroundings require a smoother and less noisy surface, such as wood blocks or the best grades of bituminous pavements.

Class 3. Retail Shopping and Office Building Districts.— Treated wood block pavements; the best grades of bituminous pavements on a Portland cement concrete base. At the present time the only wood recommended for wood block pavements is long-leaf yellow pine.

Class 4. Residential Districts in the City Proper.— Treated wood block pavements; the best grades of bituminous pavements or Portland cement concrete pavements; the choice to be determined by the intensity and character of the traffic.

Class 5. Suburb and Residential Districts.— Cheaper types of bituminous pavements, using old macadam surfaces for the base when suitable, or Portland cement concrete pavements.

Class 6. Park Roads Carrying only Pleasure Traffic.— Bituminous pavements, using old macadam for the base where suitable, or Portland cement concrete pavements.

The committee deemed it inadvisable and unnecessary to prepare new specifications for the pavement recommended in view of the fact that most excellent specifications have been carefully prepared after thorough discussion by experts, and adopted by organizations of high standing.

It was recommended that paving work done by the city and the provisions and requirements of any guaranty relating to such work shall conform substantially to specifications adopted by the American Society of Municipal Improvements for granite block, wood block and bituminous pavements; for Portland cement concrete surfaces the work should conform substantially to the standard specifications of the American Concrete Institute.

The result of the adoption of the recommendation of the committee was the advertising and awarding of contracts in groups. These awards were made on the following basis: Eighteen streets with a yardage of 88,000; 19 streets with a yardage of 44,895; 17 streets with a yardage of 27,645; 14 streets with a yardage of 31,800; 11 streets with a yardage of 35,000; and 8 streets with a yardage of 21,490.

The activities of the various services are briefly summarized below:

BRIDGE SERVICE.

Under the supervision of the Bridge Service footways have been constructed, by contract; one under railroad tracks at Ainsworth street; one at Gove street and another at Wordsworth street over railroad tracks. The possibility of accidents to persons crossing tracks at these locations has been eliminated by the building of these footways. Spring Street Bridge over the Charles river has been widened and the work completed. Malden Bridge, now under construction, is a much needed improvement which will give a much wider and deeper channel.

As a further precaution and safety measure the gates at bridges over tide-waters have been painted with black and white stripes so as to be more noticeable when closed and to serve as a warning that the draw is open.

FERRY SERVICE.

Extensive repairs have been made to three of the ferryboats during the year under orders from the United States steamboat inspectors. A new boat should be built to take the place of the "D. D. Kelly," which has been in active service since 1879.

LIGHTING SERVICE.

Boulevard type of lamps have been installed on Canal street, one of the main arteries of travel to the North Station, and also at City square, Charlestown, and 114 electric and thirty-one gas lamps installed in different parts of the city.

PAVING SERVICE.

The special appropriation of \$500,513.35 provided funds to repave and repair a number of streets which

were in bad condition. This work is being done by contract and the types of paving are those recommended by the committee of experts appointed by the Mayor, and include granite block, wood block and asphalt on a concrete base.

Concrete roadways, the first to be built in Boston, are in process of construction by the department force. Three streets in different parts of the city are being constructed with concrete, which is laid 6 inches deep, increasing to 8 inches deep in the center.

The department force has been employed resurfacing macadam streets in the suburban districts. In all cases either a tar or asphalt binder has been used.

SANITARY SERVICE.

The collection and disposal of ashes and garbage in the suburban districts by contract still continues. The awarding of the contract to the lowest bidder has not been at all satisfactory; the prices bid were so low that the contractors, in three instances, defaulted before the end of the year and the department was obliged to call upon the bonding company to complete the contracts.

STREET CLEANING SERVICE.

The policy of oiling macadam streets was continued during the past year with satisfactory results.

The unusual heavy snow fall of last year made necessary considerable extra work for this service, to keep the streets in the down-town wholesale and retail shopping districts in a passable condition.

The flushing of streets, by pressure flushers, for the removal of accumulated dirt, on paved streets, was adopted and proved very effective.

SEWER SERVICE.

Some of the most important projects of this service during the year were as follows:

A new system of sanitary and storm sewers in Dorchester avenue, from Broadway to Andrew square in connection with the Dorchester Tunnel. New tide-gate chamber on Muddy river conduit in Deerfield street and new tide-gate chamber with overflow at Albany and East Dedham streets. The completion of

the main channel of Stony brook to a point 100 feet beyond Washington street, near Franklin place, and the completion of the main channel of Davenport brook from Codman street to Washington street.

WATER SERVICE.

During the year 13.3 miles of water pipe, varying in size from 8 to 16 inches, were laid, and 168 fire hydrants installed. In East Boston 3,660 linear feet of 24-inch pipe was laid in Chelsea, Porter and Cottage streets and connected with the 12-inch pipe in Maverick street.

Five thousand eight hundred and two meters were installed on old services and 1,287 on new services, making a total now installed of 61,500 meters.

Twenty-six hundred linear feet of 30-inch high service pipe laid in Curve street, Hudson street and Kneeland street, will be connected with the high service in Harrison avenue early in the coming year.

HIGH PRESSURE FIRE SERVICE.

Pending the erection of the high pressure pumping station which is to be built on Commercial street, at the North End Playground, connection has been made with the high service line at Tremont street. This has made 188 hydrants on the high pressure fire service available in the business district in case of fire.

Twenty-five hundred feet of main pipe were laid and 16 hydrants installed on the high pressure service during the year.

THE STRANDWAY.

The improvement of the foreshore, flats and channels of that part of Dorchester Bay, known as Old Harbor, was authorized by chapter 274 of the Acts of the Legislature of this year. Contract has been made for the extension of the present sewer overflows and the dredging of over 1,100,000 yards to a depth of 12 feet below low water. The material dredged will be deposited on the present shore line for a distance of nearly 1,000 feet over the present flats for more than a mile in length, thereby recovering 56 acres of land.

When this work is finished it will provide a large recreation ground for old as well as young and a water filled basin at all tides for boating and bathing.

**Expenditures Under the Maintenance Appropriation of
From February 1, 1916,**

| | Central. | Bridge. | Ferry. |
|---|-------------|--------------|--------------|
| A. PERSONAL SERVICE AS PER SCHEDULE A: | | | |
| 1. Permanent employees..... | \$68,551 73 | \$220,978 94 | \$180,913 23 |
| 2. Temporary employees..... | | , 808 25 | 7,465 09 |
| 3. Unassigned..... | | 873 11 | 964 42 |
| B. SERVICE OTHER THAN PERSONAL: | | | |
| 1. Printing and binding..... | 873 52 | | 486 36 |
| 2. Postage..... | 307 65 | 93 39 | 6 00 |
| 3. Advertising and posting..... | | 96 52 | 34 60 |
| 4. Transportation of persons..... | 229 35 | 434 10 | 75 00 |
| 5. Cartage and freight..... | | 36 34 | 295 03 |
| 6. Hire of teams and auto trucks..... | | 162 28 | 2,924 72 |
| 7. Heat..... | | | |
| 8. Light and power..... | | 7,992 65 | 4,649 09 |
| 9. Lighting streets, alleys and parks..... | | | |
| 10. Rent, taxes and water..... | | 501 10 | |
| 12. Premium on surety bond..... | 6 00 | | 90 00 |
| 13. Communication..... | 62 24 | 176 08 | 299 54 |
| 14. Motor vehicle repairs and care..... | 323 83 | 1,463 40 | |
| 15. Motorless vehicle repairs..... | | | |
| 16. Care of horses..... | | | |
| 18. Cleaning..... | | 17 67 | 35 75 |
| 19. Removal of ashes, dirt and garbage..... | | | 24 57 |
| 20. Disposal of ashes, dirt and garbage..... | | | |
| 21. Removal of snow..... | | | |
| 22. Medical..... | | | 12 50 |
| 23. Veterinary..... | | 33 45 | |
| 24. Blacksmith..... | | 1,684 74 | |
| 27. Testing materials and supplies..... | | 80 00 | 42 72 |
| 28. Expert and architect..... | | | |
| 29. Stenographic, copying and indexing..... | | | |
| 32. Towing..... | | | 89 60 |
| 35. Fees, service of venires, etc..... | 17 00 | 33 00 | |
| 36. Boiler inspection..... | | 25 00 | |
| 37. Photographic and blueprinting..... | 1 56 | 57 60 | |
| 39. General plant..... | 77 55 | 10,170 10 | 31,648 66 |
| 40. Harness, etc., repairs..... | | 26 95 | |
| 41. Horseshoeing and clipping..... | | 329 60 | |
| C. EQUIPMENT: | | | |
| 2. Machinery..... | | 93 42 | |
| 3. Electrical..... | | | 10 75 |

PUBLIC WORKS DEPARTMENT.

13

the Several Services by Items of the Segregated Budget,
to January 31, 1917.

| Lighting. | Paving. | Sanitary. | Street Cleaning. | Sewer. | Water. | Totals. |
|------------|--------------|--------------|---------------------|--------------|--------------|----------------|
| \$5,467 86 | \$587,986 09 | \$419,816 25 | \$369,686 32 | \$201,187 83 | \$474,961 72 | \$2,529,549 97 |
| | | | | | | 8,273 34 |
| 390 00 | 16,539 09 | 6,668 40 | 35 092 74 | 3,880 46 | 11,916 87 | 76,325 09 |
| | | 1,000 00 | 69 00 | 298 45 | 144 85 | 2,882 18 |
| 20 00 | 483 64 | 74 80 | 204 58 | 356 42 | 474 71 | 2,021 19 |
| | 65 28 | 17 30 | 17 00 | 4 20 | 313 18 | 548 08 |
| 15 80 | 988 07 | 18 60 | 3 80 | 920 13 | 3,400 62 | 6,085 47 |
| | 39 99 | 7 83 | 1,189 84 | 5 48 | 216 70 | 1,791 21 |
| | 33,725 50 | 160,326 83 | 88,400 40 | 623 92 | 571 50 | 286,735 15 |
| | | | | 105 31 | | 105 31 |
| | 1,568 57 | 4,734 33 | 537 57 | 2,480 54 | 983 46 | 22,946 21 |
| 736,736 19 | | | | | | 736,736 19 |
| | 2,278 71 | 1,020 00 | 6,358 12 | | 1,808 48 | 11,966 41 |
| | | | | | 12 50 | 108 50 |
| 53 | 1,644 74 | 939 40 | 671 23 | 787 87 | 1,469 06 | 6,050 69 |
| 375 25 | 3,256 21 | 3,952 01 | 3,758 76 | 1,258 69 | 3,599 31 | 17,987 46 |
| | 1,409 67 | 2,667 34 | 8,932 15 | 678 58 | 989 84 | 14,677 58 |
| | 456 39 | 1,044 00 | 1,706 25 | 121 00 | 32 60 | 3,360 24 |
| | 130 00 | 87 00 | 96 00 | 32,848 80 | 27 84 | 33,243 06 |
| | | 122,118 53 | | 151 75 | | 122,294 85 |
| | 157 20 | 141,191 55 | 1,010 25 | | | 142,359 00 |
| | 48,500 07 | | | | | 48,500 07 |
| | 60 29 | 75 00 | 86 50 | 35 00 | 75 28 | 344 57 |
| | 330 00 | 623 40 | 288 57 | 101 67 | 293 38 | 1,670 47 |
| | 935 33 | 1,147 94 | 351 35 | 241 61 | 36 80 | 4,397 77 |
| | 557 00 | | 170 00 | 195 00 | 1,408 16 | 2,452 88 |
| 24,438 95 | | | | 12 60 | 285 00 | 24,736 55 |
| 2,167 39 | | | | | | 2,167 39 |
| | 60 55 | | | 335 00 | | 485 15 |
| | 571 00 | 21 00 | 620 40 | 131 00 | 187 40 | 1,580 80 |
| | 70 00 | | | 5 00 | 10 00 | 110 00 |
| | 45 50 | | 47 50 | | 26 78 | 178 94 |
| 2,421 06 | 9,316 59 | 595 29 | 4,292 34 | 3,747 21 | 31,069 01 | 93,337 81 |
| | 315 45 | | 326 85 | 11 10 | 87 50 | 767 85 |
| | 4,186 60 | 3,244 15 | 3,396 61 | 1,006 73 | 1,162 41 | 13,326 10 |
| | 152 00 | | 349 00 | 3,676 25 | 57 60 | 4,328 27 |
| | | | | | 92 55 | 103 30 |

Expenditures Under the Maintenance Appropriation of the

| | Central. | Bridge. | Ferry. |
|--|-------------|--------------|--------------|
| C. EQUIPMENT: | | | |
| 4. Motor vehicles..... | \$527 77 | \$619 37 | |
| 5. Motorless vehicles..... | | | |
| 6. Stable..... | | 38 99 | |
| 7. Furniture and fittings..... | | 123 56 | \$9 31 |
| 9. Office..... | | | |
| 11. Marine..... | | | 465 20 |
| 13. Tools and instruments..... | | 535 50 | 1,275 33 |
| 14. Live stock..... | | | |
| 16. Wearing apparel..... | | 8 91 | |
| 17. General plant..... | | 218 74 | 130 18 |
| D. SUPPLIES: | | | |
| 1. Office..... | 2,885 59 | 1,010 20 | 882 48 |
| 2. Food and ice..... | | 103 41 | 47 12 |
| 3. Fuel..... | | 2,345 69 | 54,890 04 |
| 4. Forage and animal..... | | 1,171 09 | |
| 5. Medical, surgical, laboratory..... | | | |
| 7. Veterinary..... | | | |
| 8. Laundry, cleaning, toilet..... | 4 10 | 52 54 | 575 16 |
| 10. Agricultural..... | | | |
| 11. Motor vehicle..... | 338 15 | 559 24 | |
| 13. Chemicals and disinfectants..... | | 1 50 | 49 50 |
| 16. General plant..... | | 1,397 70 | 3,319 70 |
| E. MATERIALS: | | | |
| 1. Building..... | | 317 23 | 38 04 |
| 2. Highway..... | | | |
| 3. Bridges..... | | 19,950 16 | |
| 4. Ferries..... | | | 4,880 45 |
| 5. Sewer..... | | | |
| 6. Water..... | | | |
| 9. Machinery..... | | 482 10 | |
| 10. Electrical..... | | 155 44 | 301 44 |
| 11. Marine..... | | | |
| 13. General plant..... | | 170 03 | |
| F. SPECIAL ITEMS: | | | |
| 2. Damages..... | | | |
| 7. Pensions and annuities..... | | 5,288 97 | 6,985 60 |
| 11. Workingmen's compensation..... | | | |
| 12. Contracts for construction where money is derived from taxes as per Schedule B..... | | 16,074 98 | |
| Totals..... | \$74,206 04 | \$296,793 04 | \$303,917 18 |

PUBLIC WORKS DEPARTMENT.

15

Several Services by Items of the Segregated Budget.—*Concluded.*

| Lighting. | Paving. | Sanitary | Street Cleaning. | Sewer. | Water. | Totals. |
|--------------|--------------|--------------|---------------------|--------------|--------------|----------------|
| \$162 17 | \$1,372 01 | \$2,756 42 | \$1,404 47 | \$1,097 61 | \$4,853 46 | \$12,793 28 |
| ..... | 2,081 50 | 1,385 12 | 1,559 00 | 18 10 | ..... | 5,043 72 |
| ..... | 1,202 99 | 79 35 | 518 72 | 122 48 | 326 74 | 2,289 27 |
| ..... | ..... | ..... | ..... | ..... | 28 76 | 161 63 |
| ..... | 85 80 | ..... | 33 25 | ..... | 1,253 69 | 1,372 74 |
| ..... | ..... | ..... | ..... | ..... | ..... | 465 20 |
| 25 | 4,370 59 | 1,092 33 | 3,752 05 | 908 69 | 42,013 43 | 53,948 17 |
| ..... | 700 00 | 2,112 50 | 2,837 50 | 2,005 00 | 325 00 | 7,980 00 |
| ..... | 203 54 | 17 74 | 1,303 11 | 642 78 | 223 96 | 2,400 04 |
| ..... | 71 88 | 180 00 | 449 52 | 2,422 26 | 283 28 | 3,755 86 |
| 100 44 | 4,558 40 | 1,202 12 | 1,069 61 | 1,959 20 | 6,962 70 | 20,630 74 |
| ..... | 139 08 | 58 25 | 46 52 | 36 42 | 36 38 | 467 18 |
| ..... | 6,295 56 | 1,837 82 | 365 54 | 26,331 77 | 3,196 62 | 95,263 04 |
| ..... | 23,861 93 | 46,645 85 | 40,019 57 | 5,065 39 | 9,998 90 | 126,762 73 |
| ..... | ..... | ..... | ..... | 5 78 | ..... | 5 78 |
| ..... | 112 77 | 183 74 | 96 02 | ..... | 108 37 | 500 90 |
| ..... | 124 51 | ..... | 43 77 | 140 72 | 89 41 | 1,030 21 |
| ..... | ..... | ..... | ..... | 41 10 | ..... | 41 10 |
| 114 08 | 1,832 26 | 1,816 60 | 3,328 79 | 1,197 33 | 2,792 57 | 12,029 02 |
| ..... | 95 20 | 89 95 | 85 65 | 112 70 | 27 00 | 461 50 |
| ..... | 1,165 79 | 933 13 | 2,152 76 | 2,026 37 | 4,626 66 | 15,622 11 |
| ..... | 813 05 | ..... | 189 44 | 1,247 32 | 694 88 | 3,299 96 |
| ..... | 167,604 09 | ..... | 59,049 61 | ..... | ..... | 226,653 70 |
| ..... | ..... | ..... | ..... | ..... | ..... | 19,950 16 |
| ..... | ..... | ..... | ..... | ..... | ..... | 4,880 45 |
| ..... | ..... | ..... | ..... | 3,290 71 | ..... | 3,290 71 |
| ..... | ..... | ..... | ..... | ..... | 195,790 11 | 195,790 11 |
| ..... | 1 00 | ..... | 8 37 | ..... | ..... | 491 47 |
| ..... | 26 00 | 14 62 | ..... | ..... | 542 86 | 1,040 36 |
| ..... | ..... | ..... | ..... | 211 73 | ..... | 211 73 |
| ..... | 5,210 26 | 13,180 86 | 6,461 13 | ..... | 1,644 87 | 26,667 15 |
| ..... | ..... | ..... | ..... | ..... | 3,866 05 | 3,866 05 |
| 360 00 | 43,336 80 | 17,887 62 | 16,829 01 | 16,873 68 | 34,414 73 | 141,976 41 |
| ..... | 2,765 70 | 6,573 89 | 2,894 30 | 1,234 29 | 1,824 30 | 15,292 48 |
| ..... | ..... | ..... | ..... | ..... | 66,183 80 | 82,258 78 |
| \$772,769 97 | \$983,910 24 | \$969,438 86 | \$672,160 84 | \$322,199 03 | \$917,823 64 | \$5,313,218 84 |

**Financial Statement of the Public Works Department, February 1, 1916, to
January 31, 1917.— Maintenance.**

| DIVISION AND SERVICE. | Appropriations, 1916-17. | Transfers To. | Transfers From. | Total Credits. | Expenditures, 1916-17. | Balances, January 31, 1917. |
|--|-----------------------------|--------------------|--------------------|-----------------------|---------------------------|-----------------------------------|
| Central Office..... | \$74,725 00 | | | \$74,725 00 | \$74,206 04 | \$518 96 |
| Bridge Service..... | 312,247 99 | | \$5,801 43 | 306,446 56 | 296,793 04 | 9,653 52 |
| Ferry Service..... | 298,115 75 | \$5,801 43 | | 303,917 18 | 303,917 18 | |
| Lighting Service..... | 779,491 36 | | 3,875 70 | 775,615 66 | 772,769 97 | 2,845 69 |
| Paving Service..... | 981,594 54 | 2,315 70 | | 983,910 24 | 983,910 24 | |
| Sanitary Service..... | 963,488 76 | 5,950 12 | | 969,438 88 | 969,438 86 | 02 |
| Street Cleaning and Oiling Service..... | 677,178 76 | | 4,450 12 | 672,728 64 | 672,160 84 | 567 80 |
| Sewer Service..... | 323,625 20 | 60 00 | | 323 685 20 | 322,199 03 | 1,486 17 |
| Water Service..... | 939,700 16 | | | 939,700 16 | 917,823 64 | 21 876 52 |
| Totals..... | \$5,350,167 52 | \$14,127 25 | \$14 127 25 | \$5,350,167 52 | \$5,313,218 84 | \$36,948 68 |

NOTE.— See next page for items of expenditures on segregated appropriations.

The expenditures under the several appropriations
for the year 1916-17 were as follows:

| DIVISION SERVICE. | Current Expenses. | Special Appropriations. | Total Expenditures. | Balances, January 31, 1917. |
|--|-----------------------|----------------------------|------------------------|-----------------------------------|
| Central Office..... | \$74,206 04 | | \$74,206 04 | \$518 96 |
| Bridge Service..... | 296,793 04 | \$68,177 24 | 364,970 28 | 124,757 66 |
| Ferry Service..... | 303,917 18 | 352 77 | 304,269 95 | 1,775 00 |
| Lighting Service..... | 772,769 97 | | 772,769 97 | 2,845 69 |
| Paving Service..... | 983,910 24 | 472,020 90 | 1,455,931 14 | 364,516 25 |
| Sanitary Service..... | 969,438 86 | 1,298 50 | 970,737 36 | 15,271 68 |
| Street Cleaning and Oiling Service..... | 672,160 84 | | 672,160 84 | 567 80 |
| Sewer Service..... | 322,199 03 | 1,051,074 18 | 1,373,273 21 | 348,740 73 |
| Water Service..... | 917,823 64 | 47,868 21 | 965,691 85 | 109,022 71 |
| Strandway and Old Harbor Improvement..... | | 5,124 42 | 5,124 42 | 593,875 58 |
| High Pressure Fire Service.. | | 63,126 30 | 63,126 30 | 344,975 73 |
| Totals..... | \$5,313,218 84 | \$1,709,042 52 | \$7,022,261 36 | \$1,906,867 79 |

PUBLIC WORKS DEPARTMENT.

17

Comparative Table Showing Cost of Maintenance of the Street Department * and Public Works Department Since 1907.

| DIVISION AND SERVICE. | 1907-08. | 1908-09. | 1909-10. | 1910-11. | 1911-12. | 1912-13. | 1913-14. | 1914-15. | 1915-16. | 1916-17. |
|-----------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Central Office..... | ..... | ..... | \$22,518 63 | \$23,627 76 | \$72,943 26 | \$77,515 65 | \$80,159 50 | \$74,592 01 | \$70,618 59 | \$74,208 04 |
| Bridge..... | \$199,342 12 | \$180,273 01 | 198,852 71 | 201,995 00 | 274,876 76 | 268,959 44 | 271,423 04 | 283,066 41 | 269,283 23 | 277,847 65 |
| Boston and Cambridge Bridges..... | 11,230 57 | 18,524 29 | 18,464 72 | 22,006 57 | 21,055 26 | 17,183 87 | 17,744 48 | 18,645 52 | 17,765 44 | 18,945 39 |
| Ferry..... | 294,357 82 | 249,068 39 | 222,101 10 | 235,920 63 | 247,628 07 | 269,016 52 | 277,727 39 | 293,671 43 | 277,048 47 | 303,917 18 |
| Lighting..... | 840,016 93 | 809,510 06 | 719,574 91 | 710,204 84 | 726,967 18 | 768,779 08 | 795,880 53 | 753,311 73 | 739,599 62 | 773,769 97 |
| Paving..... | 831,113 67 | 775,838 06 | 1,089,247 94 | 1,178,546 90 | 1,162,660 29 | 1,236,686 29 | 1,361,082 17 | 1,223,364 69 | 1,029,374 44 | 802,150 73 |
| Removal of snow..... | 144,117 96 | 58,143 37 | 131,357 56 | 112,623 21 | 124,961 68 | 106,691 07 | 64,007 49 | 165,105 19 | 131,142 57 | 303,570 39 |
| Sanitary..... | 790,243 78 | 745,200 90 | 637,255 93 | 723,249 64 | 730,292 62 | 790,809 01 | 925,318 56 | 1,017,452 66 | 1,042,315 06 | 969,438 86 |
| Sewer..... | 402,389 90 | 351,162 41 | 301,145 94 | 312,541 05 | 325,508 86 | 378,873 18 | 387,120 67 | 362,672 07 | 339,446 62 | 322,199 03 |
| Street Cleaning..... | 501,688 67 | 419,275 91 | 353,550 33 | 370,602 81 | 408,571 72 | 454,623 71 | 492,324 45 | 472,730 69 | 499,959 90 | 426,899 28 |
| Street Watering and Oiling..... | 152,235 45 | 154,679 90 | 170,728 75 | 160,543 93 | 163,036 26 | 198,993 93 | 228,511 50 | 174,312 00 | 139,744 97 | 121,450 68 |
| Water..... | ..... | ..... | ..... | ..... | 822,377 46 | 835,072 00 | 899,338 91 | 894,170 14 | 904,135 19 | 917,823 64 |
| Totals..... | \$4,166,736 87 | \$3,761,676 30 | \$3,864,798 52 | \$4,051,952 34 | \$5,080,879 42 | \$5,403,203 75 | \$5,800,638 69 | \$5,733,594 54 | \$5,460,434 30 | \$5,313,218 84 |

* Engineering and Water Departments were consolidated into the Public Works Department February 1, 1911.

REVENUE.

*Collected by City Collector on Account of the Public Works
Department (Maintenance Account) and Credited
to General Revenue, as per Collector.*

Bridge Service:

| | | |
|--|----------|------------|
| Town of Milton on account of | | |
| Granite Avenue Bridge | \$677 25 | |
| Repairs to Albany Street Bridge, over Boston & Albany Railroad, | 687 31 | |
| Sale of shanty | 17 00 | |
| Labor and materials for repairs | 10 00 | |
| Rent | 1,265 07 | |
| | <hr/> | \$2,656 63 |

Ferry Service:

| | | |
|---|-------------|-----------|
| Tolls | \$93,624 96 | |
| Headhouse privileges | 600 00 | |
| Rents | 464 00 | |
| Sale of old material | 594 78 | |
| Commission on telephone stations, | 53 64 | |
| Cleaning telephone booths | 44 00 | |
| Damage to boat | 25 50 | |
| Free use of ferries, July 4 | 1 00 | |
| | <hr/> | 95,407 88 |

Lighting Service:

| | | |
|--------------------------------------|------------|----------|
| Lighting Cambridge Bridges | \$2,531 35 | |
| | <hr/> | 2,531 35 |

Paving Service:

| | | |
|---|-------------|-----------|
| Permits | \$27,431 13 | |
| Assessments on abutters for edge- stones and sidewalks | 16,516 50 | |
| Labor and materials furnished | 9,884 95 | |
| Services of inspectors | 4,326 00 | |
| Labor and materials furnished on street openings | 3,724 70 | |
| Sale of old material | 1,866 52 | |
| Removing snow from sidewalks in front of cemeteries | 500 00 | |
| Rent | 180 00 | |
| Commonwealth of Massachusetts, horse killed | 125 00 | |
| Board of horse | 31 00 | |
| Sale of old barrels | 23 50 | |
| Sale of old cobblestones | 3 50 | |
| Sale of gasoline | 1 80 | |
| Refund on bond | 1 43 | |
| | <hr/> | 64,616 03 |

Carried forward \$165,211 89

PUBLIC WORKS DEPARTMENT.

19

| | | | |
|--|----------------|-----------------------|--|
| <i>Brought forward</i> | | \$165,211 89 | |
| Sanitary Service: | | | |
| Sale of tickets for collection of commercial waste | \$57,548 05 | | |
| Sale of manure (all services) | 1,647 91 | | |
| Rent of dumping scow | 310 00 | | |
| Sale of old material | 148 81 | | |
| Labor and materials, furnished | 80 08 | | |
| Commonwealth of Massachusetts, horse killed | 50 00 | | |
| Sale of scow | 10 00 | | |
| Sale of wagon | 5 00 | | |
| | | 59,799 85 | |
| Street Cleaning Service: | | | |
| Removal of dirt, farmers market, | \$898 52 | | |
| Rent of stable | 450 00 | | |
| | | 1,348 52 | |
| Sewer Service: | | | |
| Disposal of sewage | \$6,423 73 | | |
| Entrance fees | 3,479 44 | | |
| Labor and material furnished | 2,469 95 | | |
| Sale of old materials | 1,086 59 | | |
| Sewer assessments, Hyde Park | 214 20 | | |
| Sale of gasolene | 105 74 | | |
| Sewer assessments | 81 77 | | |
| Damage to wagon | 79 75 | | |
| Sale of wagon | 10 00 | | |
| Sale of old building | 10 00 | | |
| Rent | 10 00 | | |
| Refund on freight charges | 84 | | |
| | | 13,972 01 | |
| Water Service: | | | |
| Water rates | \$3,037,974 66 | | |
| Labor and materials, service pipes, | 30,611 24 | | |
| Labor and materials, elevator and fire pipes | 27,490 71 | | |
| Fees for summonses, overdue rates | 3,746 25 | | |
| Labor and materials furnished, repairs | 3,275 08 | | |
| Sale of materials | 2,533 27 | | |
| Interest on bank deposits | 1,059 38 | | |
| Extension of main pipe | 905 97 | | |
| Sale of old material | 855 53 | | |
| Off and on for non-payment | 672 00 | | |
| Board of horses | 121 00 | | |
| Testing meters | 68 12 | | |
| Sale of automobile | 35 00 | | |
| Miscellaneous | 1 00 | | |
| | | 3,109,349 21 | |
| | | <u>\$3,349,681 48</u> | |

CONTRACTS MADE BY PUBLIC WORKS DEPARTMENT, FROM FEBRUARY 1, 1916, TO JANUARY 31, 1917.
Hired Team Contracts, from February 1, 1916, to January 31, 1917.

| District. | Awarded to | Single, per Day. | Double, per Day. | Extra Men, per Day. | Auto Trucks, per Day. | Paving Service. | Sanitary Service. | Sewer Service. | Street Cleaning Service. | Total. |
|---|-------------------------------------|------------------------|------------------------|------------------------------|--------------------------------|--------------------|----------------------|-------------------|--------------------------------|-------------|
| No. 1, South Boston and Dorchester North ¹ . | Jeremiah J. McCarthy Com- pany. | \$3 50 | \$3 50 | \$2 50 | \$20 00 | \$5,536 13 | \$8,182 80 | ..... | \$906 20 | \$14,025 19 |
| No. 2, East Boston and Breed's Island ¹ . | Edward J. McHugh, Jr. | 5 00 | 2 25 | 2 00 | 14 00 | 2,052 50 | ..... | \$10 00 | 224 00 | 2,286 50 |
| No. 3, Charlestown ⁴ . | Northern Construction Com- pany. | 5 00 | 2 00 | 2 50 | 35 00 | ..... | 5,429 66 | ..... | 953 75 | 6,383 41 |
| No. 4, a. Brighton North ² . | A. J. & G. H. McMurtry. | 5 25 | 2 75 | 2 25 | 15 00 | 1,486 96 | ..... | 13 13 | ..... | 1,500 09 |
| No. 4, b. Brighton South ² . | Bernard Malone. | 5 25 | 2 75 | 2 25 | 15 00 | 1,507 14 | ..... | ..... | ..... | 1,567 14 |
| No. 5, West Roxbury ⁷ . | M. McGinnis. | 4 45 | 2 65 | 2 50 | 25 00 | 5,832 98 | 12,829 71 | 28 93 | ..... | 13,691 62 |
| Nos. 6-9, Dorchester and Ashmont ² . | John D. Lyons. | 4 80 | 3 00 | 2 00 | 20 00 | 2,705 30 | ..... | 146 10 | ..... | 2,851 40 |
| No. 7, Roxbury South and Jamaica Plain ³ . | Charles J. Jacobs Company. . | 5 00 | 1 50 | 2 50 | ..... | 3,683 75 | 23,350 07 | ..... | 1,824 38 | 29,558 20 |
| No. 8, South End and Roxbury North ⁴ . | Northern Construction Com- pany. | 4 85 | 2 10 | 2 50 | 35 00 | 7,024 04 | 47,844 41 | 185 59 | 8,046 30 | 63,100 34 |
| No. 10, North and West Ends and Back Bay ⁶ . | Northern Construction Com- pany. | 3 60 | 3 30 | 2 50 | 35 00 | 1,913 25 | 16,467 00 | ..... | 15,320 57 | 33,700 82 |
| No. 11, Hyde Park ¹ . | George H. Noone. | 5 00 | 3 00 | 2 50 | 20 00 | 190 00 | ..... | ..... | ..... | 190 00 |

¹ Advertised and awarded to lowest bidder.
² Advertised and awarded to lowest bidder on doubles; fourth lowest bidder on singles.
³ Advertised and awarded to second lowest bidder on doubles; lowest bidder on singles.
⁴ Advertised and awarded to third lowest bidder on doubles; lowest bidder on singles.
⁵ Advertised and awarded to ninth lowest bidder on doubles; lowest bidder on singles.
⁶ Advertised and awarded to lowest bidder on doubles; third lowest bidder on singles.
⁷ Advertised and awarded to second lowest bidder on doubles and second lowest bidder on singles.

BRIDGE AND FERRY DIVISION.—BRIDGE SERVICE. Bridge Work.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|--|----------------------------------|-----------------|------------------------------|-----------------|--------------------------|
| 1 Building a footbridge at Gove street, East Boston... | The Boston Bridge Works, Inc., | Feb. 2, 1916. | Completed Oct. 5, 1916.... | \$8,626 00 | \$8,702 05 |
| 1 Building a footway at Ainsworth street, West Roxbury. | Charles J. Jacobs Company... | Mch. 15, 1916. | Completed Nov. 18, 1916.... | 5,173 75 | 5,742 14 |
| 1 Building a footbridge at Wordsworth street, East Boston. | Daniel Marr & Son Company... | Mch. 21, 1916. | Completed Nov. 11, 1916.... | 2,210 00 | 2,266 60 |
| 1 Reconstruction of Malden Bridge and building the masonry piers. | Hugh Nawn Contracting Company. | Mch. 30, 1916. | Unfinished..... | 141,557 51 | 57,558 43 |
| 1 Structural steel work, mechanical and electrical equipment for the highway draw span of the Malden Bridge. | McClintic-Marshall Company.. | May 20, 1916. | Unfinished..... | 67,630 00 | Nothing. |
| 1 Replanking sidewalk Chelsea Bridge, over Boston & Maine Railroad, between Chelsea Bridge South and Chelsea Bridge North. | W. S. Rendle..... | Aug. 4, 1916. | Completed Oct. 7, 1916.... | 1,348 20 | \$1,408 12 |
| 1 Furnishing and installing machinery for turning draw, Dover Street Bridge. | R. & S. Machine Company.... | April 16, 1916. | Completed July 13, 1916.... | 1,225 00 | 1,385 97 |
| 1 Installing navigation lights, Broadway Bridge.... | Barnes-Pope Electric Company, | Mch. 8, 1916. | Completed April 6, 1916.... | 355 00 | 385 00 |
| 1 Making alterations to air tanks for drawbridges.... | R. & S. Machine Company.... | Aug. 9, 1916. | Completed Sept. 22, 1916.... | 515 00 | 537 00 |
| 1 Rebuilding easterly sidewalk, Charlestown Bridge.. | W. A. Murtfeldt Company..... | Sept. 5, 1916. | Completed Dec. 9, 1916.... | 1,691 00 | 1,701 68 |
| 1 Furnishing and installing electrical appliances and rebuilding the operating house at Dorchester Avenue Drawbridge. | Carlisle-Connor Company..... | Sept. 20, 1916. | Unfinished..... | 767 00 | Nothing. |
| 1 Repaving with wood blocks Huntington Avenue Bridge, over Boston & Albany Railroad. | Central Construction Company. | Sept. 20, 1916. | Completed Dec. 11, 1916.... | 2,535 00 | \$2,535 00 |
| 1 Cleaning and painting Broadway Bridge, over Fort Point channel. | Maurice M. Devine..... | Sept. 30, 1916. | Unfinished..... | 5,900 00 | 4,914 70 |
| 1 Repairing end lift, Northern Avenue Drawbridge... | R. & S. Machine Company.... | Oct. 3, 1916. | Completed Nov. 10, 1916.... | 1,185 00 | 1,395 83 |
| 1 Repairing machinery, Charlestown Bridge draw.... | R. & S. Machine Company.... | Oct. 16, 1916. | Completed Nov. 6, 1916.... | 147 00 | 147 00 |
| Alteration of bridge, Brookline avenue, over the Boston & Albany Railroad, Roxbury. | Public Service Commission.... | July 11, 1916. | | | |
| 1 Rebuilding roadway floor of draw span, Chelsea Bridge South. | Michael S. Kallher..... | Nov. 10, 1916. | Completed Dec. 7, 1916.... | 2,625 00 | 3,095 20 |
| Agreement relative to constructing new draw, Malden Bridge. | Boston Elevated Railway Company. | Mch. 16, 1916. | | | |

1 Advertised and awarded to lowest bidder.

2 Invitation bids, awarded to lowest bidder.

3 Paid by Boston Elevated Railway Company.

BRIDGE AND FERRY DIVISION.—FERRY SERVICE.
Ferry Work.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|---|-------------------------------|-----------------|----------------------------|-------------------------------|--------------------------|
| ¹ Teaming coal from coal pockets and delivering same to ferryboats. | Edward J. McHugh, Jr..... | Feb. 1, 1916. | Completed Jan. 31, 1917... | 25 cents ton. (2,000 lbs.) | \$3,058 52 |
| ² Weighing and vending machines in the ferry houses, | Edward E. Adams..... | Mar. 1, 1916. | Completed Jan. 31, 1917... | \$500 00 | Nothing. |
| ¹ Furnishing and installing copper and lead piping, ferryboat "Noddie Island." | I. Young & Co..... | Mar. 20, 1916. | Completed May 10, 1916... | 542 00 | \$542 00 |
| ⁴ Expressing between the North and South Ferries and the repair shop. | Edward J. McHugh, Jr..... | Mar. 24, 1916. | Completed Jan. 31, 1917... | 21 00 (per month.) | 197 11 |
| ¹ Repairing wooden frames, etc., ferryboat "Hugh O'Brien." | James E. Quirk..... | July 21, 1916. | Completed Aug. 18, 1916... | 4,968 31 | 4,968 31 |
| ¹ Repairing wooden end, etc., ferryboat "Noddie Island." | James E. Quirk..... | Sept. 19, 1916. | Completed Oct. 25, 1916... | 3,320 00 | 3,320 00 |
| ¹ Repairing hulls of ferryboats "General Hancock," "General Sumner" and "D. D. Kelly." | McKie Shipbuilding Company.. | Nov. 21, 1916. | Completed Jan. 6, 1917.... | 3,937 00 | 3,937 00 |
| ¹ Repairing hull of ferryboat "Governor Russell".... | Boston Shipbuilding Company.. | Jan. 22, 1917. | Unfinished..... | 340 00 | Nothing. |

¹ Advertised and awarded to lowest bidder.² Advertised and awarded to highest bidder.³ Paid to city.⁴ Only bid; not advertised.

STRANDWAY AND OLD HARBOR IMPROVEMENT.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|--|--------------------------------------|---------------|-------------------|-----------------|--------------------------|
| ¹ Dredging, filling, sewerage works, grading, etc., for Strandway and old harbor improvement, South Boston. | New York State Dredging Corporation. | Dec. 8, 1916. | Unfinished | \$303,180 00 | Nothing. |

¹ Advertised and awarded to lowest bidder.

HIGHWAY DIVISION.—LIGHTING SERVICE. Contracts in Force Made in Previous Years.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|---|---|-----------------|-------------------|-----------------|--------------------------|
| 1, 2, 4, 5 Furnishing gas for street lighting purposes for a period of ten years from April 1, 1914, until March 31, 1924, inclusive. | Boston Consolidated Gas Company.... | March 19, 1914. | Unfinished..... | ..... | \$196,865 42 |
| 1, 2, 4, 5 Lighting the streets, parks and alleys (except streets in Charlestown and Hyde Park) with gas for a period of ten years from April 1, 1914, until March 31, 1924, inclusive. | Boston Consolidated Gas Company.... | March 19, 1914. | Unfinished..... | ..... |  |
| 1, 2, 7 Lighting the streets, parks and alleys with electricity (except streets in Charlestown) and including Charlestown if said company shall purchase the electric distribution system located therein) for a period of ten years, from December 7, 1914, until December 6, 1924, inclusive. | The Edison Electric Illuminating Co.... | Dec. 7, 1914. | Unfinished..... | ..... | 505,396 74 |

¹ Only bid not advertised.

² \$32,652.66 paid to city, this amount representing what the city has been charged in excess of what it would have to pay for the period from July 1, 1914, to December 6, 1914, inclusive, had the prices named in schedule E of the new contract with a 10 per cent discount been in effect from July 1, 1914.

³ Agreement made July 21, 1914, that prices for gas lamps outside of contract be as follows: Triple burner lamps, per annum, \$45; fire alarm signal lamps, \$21.

⁴ Annual rates paid for gas lamps. Single burner: For gas \$9
For lighting and care... 12
Double burner: For gas \$18
For lighting and care... 15

Total.....\$33

⁵ Contracts may be terminated on April 1, 1919, if City Council votes and Mayor approves.

⁶ If rate to regular consumers is reduced to a price less than 80 cents per M. a rebate will be made to the city at the rate of 12 cents per lamp per year for each 1 cent the price is so reduced below 80 cents per M.

⁷ Lighting rates for the electric lamps are as follows:

| DESCRIPTION OF LAMP. | Fixed Costs per Lamp per Year. | Running Costs per Lamp Hour. | DESCRIPTION OF LAMP. | Fixed Costs per Lamp per Year. | Running Costs per Lamp Hour. |
|---------------------------------|--------------------------------------|------------------------------------|---|--------------------------------------|------------------------------------|
| 40 candle power Inc. lamp..... | \$10 80 | 1 $\frac{1}{2}$ cent | 320 candle power Inc. lamp..... | \$36 00 | 1 $\frac{1}{2}$ cents |
| 60 candle power Inc. lamp..... | 12 00 | $\frac{3}{4}$ cent | 400 candle power Inc. lamp..... | 42 00 | 1 $\frac{1}{2}$ cents |
| 80 candle power Inc. lamp..... | 14 00 | $\frac{3}{4}$ cent | 425 watt A. C. arc lamp..... | 36 00 | 1 $\frac{1}{2}$ cents |
| 100 candle power Inc. lamp..... | 18 00 | $\frac{3}{4}$ cent | 800 candle power Magnetite 500 watt D. C. arc lamp..... | 36 00 | 1 $\frac{1}{2}$ cents |
| 200 candle power Inc. lamp..... | 25 00 | 1 cent | 1,600 candle power Thoran 500 watt D. C. arc lamp..... | 42 00 | 2 $\frac{1}{2}$ cents |

A discount of 10 per cent is allowed from above rates.

A deduction at the rate of 1 cent per hour for lamps of 100 candle power or less and 5 cents per hour for all other lamps is allowed for all outages.

For further detail, see Report of Lighting Service.

HIGHWAY DIVISION.—PAVING SERVICE.

* Artificial Stone Sidewalks.—Rebate.

| CONTRACTOR. | Dated. | Contract Completed. | Price per Square Foot. | Amount Expended in 1916. |
|-------------------------------------|---------------------|-----------------------|------------------------|--------------------------|
| D. M. Biggs & Company..... | March 21, 1916..... | January 31, 1917..... | \$0 06 | \$763 20 |
| William J. Rafferty & Company..... | March 21, 1916..... | January 31, 1917..... | 06 | 440 10 |
| John Kelly Company..... | March 21, 1916..... | January 31, 1917..... | 06 | 65 37 |
| Simpson Brothers Corporation..... | March 21, 1916..... | January 31, 1917..... | 06 | 76 98 |
| John Varnerin..... | March 21, 1916..... | January 31, 1917..... | 06 | 22 08 |
| Charles J. Jacobs Company..... | March 27, 1916..... | January 31, 1917..... | 06 | 777 90 |
| West Roxbury Trap Rock Company..... | March 27, 1916..... | January 31, 1917..... | 06 | |
| Wilson & Tomlinson..... | March 27, 1916..... | January 31, 1917..... | 06 | 209 34 |
| Coleman Brothers..... | March 27, 1916..... | January 31, 1917..... | 06 | |
| Jeremiah J. Sullivan..... | March 27, 1916..... | January 31, 1917..... | 06 | 242 42 |
| George M. Crowell Company..... | March 31, 1916..... | January 31, 1917..... | 06 | 533 46 |
| Hervey F. Armington..... | March 31, 1916..... | January 31, 1917..... | 06 | 471 96 |
| Connolly & Diamond..... | March 31, 1916..... | January 31, 1917..... | 06 | 577 38 |
| W. A. Murtfeldt Company..... | April 11, 1916..... | January 31, 1917..... | 06 | 1,288 68 |
| Frank P. Rosano..... | April 11, 1916..... | January 31, 1917..... | 06 | 799 02 |
| Adams Pond Company..... | April 11, 1916..... | January 31, 1917..... | 06 | 1,752 86 |
| John McCourt Company..... | April 13, 1916..... | January 31, 1917..... | 06 | 436 26 |

PUBLIC WORKS DEPARTMENT.

27

| | | | | |
|---|------------------------|-----------------------|----|----------|
| Walter H. Freble Company..... | April 17, 1916..... | January 31, 1917..... | 06 | |
| J. C. Coleman & Sons Company..... | April 17, 1916..... | January 31, 1917..... | 06 | 232 80 |
| Martino DeMatteo..... | April 22, 1916..... | January 31, 1917..... | 06 | 250 86 |
| W. J. Grosvenor & Co..... | April 24, 1916..... | January 31, 1917..... | 06 | 118 32 |
| Mowatt Construction Company..... | April 27, 1916..... | January 31, 1917..... | 06 | 574 44 |
| C. W. Dolloff & Co..... | April 27, 1916..... | January 31, 1917..... | 06 | |
| Thomas J. Hind..... | May 18, 1916..... | January 31, 1917..... | 06 | 747 96 |
| O'Neill Brothers..... | June 5, 1916..... | January 31, 1917..... | 06 | |
| Hardy & Streeter..... | June 5, 1916..... | January 31, 1917..... | 06 | 21 80 |
| Michael D. Russo..... | June 14, 1916..... | January 31, 1917..... | 06 | 170 94 |
| John Landis..... | June 20, 1916..... | January 31, 1917..... | 06 | 747 60 |
| Warren Brothers Company..... | June 22, 1916..... | January 31, 1917..... | 06 | 1,160 10 |
| W. J. Kelly Company..... | June 26, 1916..... | January 31, 1917..... | 06 | 141 84 |
| United States Construction Company..... | July 18, 1916..... | January 31, 1917..... | 06 | 69 54 |
| Keller Construction Company..... | August 2, 1916..... | January 31, 1917..... | 06 | 318 48 |
| Bernard W. Marcus..... | November 2, 1916..... | January 31, 1917..... | 06 | 55 02 |
| J. F. Carroll Construction Company..... | November 16, 1916..... | January 31, 1917..... | 06 | |

* These walks are guaranteed by a surety company bond for five (5) years from date of completion and were laid on various public streets where the contractor had agreements with the abutters. The price, \$0.06 per square foot, is equivalent to the expense to the city for one half the cost of a brick sidewalk.

Artificial Stone Sidewalks.—Furnishing and Laying.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|--|-------------------------------|----------------|------------------------------|-----------------|--------------------------|
| 1, 2 East Concord street, northerly side, from Harrison avenue 245 feet easterly; Stoughton street, southerly side, from Harrison avenue 288 feet easterly; Harrison avenue, easterly side from Stoughton street to East Concord street. | Jeremiah J. Sullivan..... | June 30, 1916. | Completed Aug. 1, 1916.... | \$978 50 | \$1,003 09 |
| 1, 2 Harrison avenue, westerly side, from Kneeland street to Harvard street, city proper. | John McCourt Company..... | July 18, 1916. | Completed Aug. 17, 1916.... | 965 50 | 943 80 |
| 1, 2 Belvidere street, from Massachusetts avenue to Dalton street; Scotia street, from St. Cecilia street to Dalton street; St. Cecilia street, from Boylston street to Belvidere street, city proper; Stoughton street, southerly side, from 90 feet east of Columbia road to Stoughton Street place; Corbet street, from Norfolk street to Morton street, Dorchester; Florence street, from Ashland street to Poplar street, West Roxbury. | James Doherty..... | Aug. 19, 1916. | Unfinished..... | 7,409 25 | |
| 1, 2 Huntington avenue, westerly side, and Falmouth street, easterly side, at the Christian Science Church park, city proper. | William J. Rafferty & Co..... | Aug. 23, 1916. | Completed Sept. 28, 1916.... | 1,011 06 | 1,186 79 |
| 1, 2 Dorchester avenue, easterly side, near Richmond street, Dorchester. | D. M. Biggs & Co..... | Sept. 9, 1916. | Completed Sept. 20, 1916.... | 403 70 | 369 96 |
| 1, 2 Morton street, from N. Y., N. H. & H. R. R., Dorchester. | William J. Rafferty & Co..... | Oct. 9, 1916. | Completed Dec. 1, 1916.... | 1,235 75 | 1,131 41 |

| 1. Shirley street, southerly side, from Clifton street to Norfolk avenue; Norfolk avenue, westerly side, from Shirley street to Burrell street, Roxbury; Massachusetts avenue, easterly side, from Norway street about 67 feet northerly; Norway street, northerly side, from Massachusetts avenue about 113 feet easterly; Tremont street, easterly side, from Dover street about 59 feet northerly; Dover street, northerly side, from Tremont street about 53 feet easterly, city proper; Dorchester avenue, easterly side, at Nos. 1542, 1544 and from 1552 to 1558, Dorchester. | V. Grande..... | Nov. 23, 1916. | Unfinished..... | 3,739 05 | 759 30 |
|--|----------------|----------------|-----------------|----------|--------|
|--|----------------|----------------|-----------------|----------|--------|

1 Advertisized and awarded to lowest bidder.

* These sidewalks are guaranteed by a surety company bond for five (5) years from the date of completion.
 * Work done under chapter 393 of the Acts of 1906.

Sheet Asphalt Pavement.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|--|-------------------------------|----------------|-------------------|---|--------------------------|
| 1. ² Bardwell street, from South street to Ballard street; Dunster road, from Centre street to Pond street; Halifax street, from South Huntington avenue to Pond View avenue; Moraine street, from South Huntington avenue to Jamaica way; Temple street, from Spring street to Ivory street; Hillcrest street, from Elgin street to Temple street; Lorette street, from Centre street to Hillcrest street; Ardent street, from Belgrade avenue to Colberg avenue, West Roxbury. | Central Construction Company. | July 18, 1916. | Unfinished. | (A) 9,300 cubic yards @ \$0 55 \$5,115 00 (B) 10 cubic yards @ 2 00 20 00 (C) 35 cubic yards @ 5 00 175 00 (D) 9,920 linear feet @ 0 17 1,686 40 (E) 744 linear feet @ 0 15 111 60 (F) 825 linear feet @ 0 12 99 00 (G) 45 square yards @ 0 75 33 75 (H) 83 square yards @ 0 60 41 50 (I) 56 square yards @ 1 50 84 00 (J) 60 square yards @ 1 25 75 00 (K) 49 square yards @ 1 50 73 50 (L) 43 square yards @ 1 25 53 75 (M) 21,490 square yards @ 1 58 33,854 20 (N) 82,480 square feet @ 0 11 9,691 40 (O) 350 square feet @ 0 15 52 50 (P) Removing trees, etc., 150 00 (Q) 150 square yards @ 0 60 90 00 \$51,508 60 | \$18,472 91 |
| 1. ² Brunswick street, from Blue Hill avenue to Normandy street; Centrevale park, from Upland avenue to Bourne side street; Epping street, from Washington street to Norfolk street; Erie avenue, from Savin Hill avenue northerly; Everton street, from Geneva avenue to Olney street; Lithgow street, from Talbot avenue to Wainwright street; Normandy street, from Intervale street to Devon street; Orchardfield street, from Dorchester avenue to Freepost street; Ripley road, from Harvard street to Vassar | Central Construction Company. | July 28, 1916. | Unfinished. | (A) 11,273 cubic yards @ \$0 55 \$6,200 15 (B) 20 cubic yards @ 2 00 40 00 (C) 310 cubic yards @ 5 00 1,550 00 (D) 11,654 linear feet @ 0 18 2,097 72 (E) 721 linear feet @ 0 11 79 31 (F) 1,799 linear feet @ 0 10 179 90 (G) 15 square yards @ 0 65 9 75 (H) 252 square yards @ 0 40 100 80 (I) 62 square yards @ 1 40 86 80 (J) 194 square yards @ 1 25 242 50 (K) 162 square yards @ 1 50 243 00 (L) 198 square yards @ 1 20 237 60 (M) 27,645 square yards @ 1 60 44,232 00 (N) 96,202 square feet @ 0 12 12,025 25 (O) 1,375 square feet @ 0 14 192 50 (P) Removing trees, etc., 150 00 (R) 2,325 square yards @ .0 09 209 25 | |

| | | | | | | | |
|--|---------------------------|----------------|-------------|---|---|--|-------------|
| street; Southwick street, from Neponset avenue to Freeport street; Theodore street, from Morton street 618 feet easterly; Upland avenue, from Park street to Melville avenue, Dorchester; Cadrio street, from Magazine street to Langdon street; Homestead street, from Humboldt avenue to Elm Hill avenue; Hubert street, from Shawmut avenue to Westminster street; Randall street, from Harrison avenue to Albany street, from Roxbury; Tuckerman street, from Dorchester street to Middle street, South Boston. | Warren Brothers Company.. | Sept. 9, 1916. | Unfinished. | (S) (T) (U) (V) | 185 square yards @ 0 20 50 cubic yards @ 1 50 200 square yards @ 0 30 2,440 cubic yards @ 0 50 | 37 00 75 00 78 00 1,220 00 | \$60,386 53 |
| ¹ Appleton street, from Berkeley street to Columbus avenue; Blossom street, from Allen street to Fruit street; Boylston street, from Tremont street to Washington street; Chandler street, from Berkeley street to Columbus avenue; Fruit street, from Charles street to Blossom street; North Anderson street, from Parkman street to Fruit street; North Grove street, from Chandler street to North Grove street; Parkman street, from North Anderson street to North Grove street; West Canton street, from Fremont street to Appleton street, city proper; Dearborn street, from Albany street to Dudley street, Roxbury; West Broadway, from Dorchester avenue to E street, South Boston. | | | | (B) (C) (D) (E) (F) (G) (H) (I) (L) (M) (N) (O) (P) (Q) (R) (S) (T) (U) (V) (W) (X) (Y) (Z) (A.A.) | 10 cubic yards @ \$1 50 10 cubic yards @ 2 00 300 linear feet @ 0 20 175 linear feet @ 0 17 7 955 linear feet @ 0 15 385 square yards @ 0 53 95 square yards @ 2 00 80 square yards @ 1 80 14,900 square yards @ 2 09 28,420 square feet @ 0 16 4,547 20 4,870 square feet @ 0 17 4,830 square yards @ 0 30 150 square yards @ 0 50 12,415 square yards @ 1 21 4,365 square yards @ 2 83 2,595 square yards @ 3 42 150 tons @ 2 00 | \$15 00 20 00 60 00 29 75 1,193 25 204 05 190 00 144 00 31,120 10 4,547 20 147 80 1,449 00 75 00 15,092 15 12,338 80 8,374 90 300 00 | \$75,731 10 |
| | | | | | | | \$26,720 80 |

¹ Advertised and awarded to lowest bidder.² Work done under chapter 383 of the Acts of 1906.

Sheet Asphalt Pavement.—*Concluded.*

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|--|-------------------------------|---------------|-------------------|---|--------------------------|
| 1. Atkins street, from Washington street to Stratton street; Gaffney street, from Commonwealth avenue to Boston & Albany Railroad; Cummings road, from Commonwealth avenue 835 feet easterly; Fordham road, from Commonwealth avenue to Brighton avenue; Gloucester street, from North Beacon street to Garden street; Matchett street, from Washington street 843 feet northerly; William Jackson avenue, from Chestnut Hill avenue to Academy Hill road, Brighton; Blake street, from Hyde Park boulevard, across Randolph road; Rugby road, from Randolph road to Oakland street; Westwood street, from Richfield street to Wales place, Dorchester; Neptune road, from Bennington street to Boston, Revere Beach & Lynn Railroad; Worthworth street, from Harlowe street to Coleridge street, East Boston; Berley road, from Washington street to Florence street; Kenton road, from Washington street 800 feet southeasterly; Lorne street, from Harvard street 650 feet northerly; Perham street, from Vermont street to New York, New Haven & Hartford Railroad; Richmond street, | Central Construction Company. | Oct. 9, 1916. | Unfinished. | (A) 24,465 cubic yards @ \$0.74 \$18,104.10 (B) 20 cubic yards @ 2.00 40.00 (C) 390 cubic yards @ 6.00 2,340.00 (D) 27,320 linear feet @ 0.23 6,283.60 (E) 2,481 linear feet @ 0.15 372.15 (F) 1,284 linear feet @ 0.15 192.60 (G) 55 square yards @ 0.70 38.50 (H) 185 square yards @ 0.50 92.50 (I) 210 square yards @ 1.60 336.00 (J) 245 square yards @ 1.50 367.50 (K) 70 square yards @ 1.50 105.00 (L) 215 square yards @ 1.40 301.00 (M) 44,895 square yards @ 2.05 92,034.75 (N) 201,365 square feet @ 0.14 28,705.76 (O) 1,620 square feet @ 0.14 226.80 (P) Removing trees, etc., 500.00 (Q) 5,950 square yards @ 0.60 3,570.00 (R) 30 square yards @ 0.30 9.00 (S) 15 square yards @ 0.50 7.50 (T) 8,845 square yards @ 2.00 17,690.00 (U) 35 square yards @ 4.00 140.00 (V) 24 square feet @ 1.90 45.60 (W) 1,300 linear feet @ 0.45 585.00 (X) 44 linear feet @ 2.00 88.00 | \$2,704.90 |

\$173,187.51

| from Centre street to Montview street; Saville street, from Park street to Stratford street; Selwyn street, from Farquhar street 1,174 feet northeasterly West Roxbury. | Advertised and awarded to the lowest bidder. | Work done under chapter 383 of the Acts of 1906. |
|---|---|--|
| | EXPLANATION OF LETTERS. | |
| (A) | Earth excavation. | |
| (B) | Excavation for water boxes and hydrants. | |
| (C) | Rock excavation. | |
| (D) | Straight edgestones hauled and set. | |
| (E) | Circular edgestones set. | |
| (F) | Edgestones reset. | |
| (G) | Granite block paving hauled and laid with gravel joints. | |
| (H) | Granite block paving relaid with gravel joints. | |
| (I) | Granite block paving hauled and laid with grout joints, including concrete base. | |
| (J) | Granite block paving relaid with grout joints, including concrete base. | |
| (K) | Flagging crosswalks hauled and laid with grout joints, including concrete base. | |
| (L) | Flagging crosswalks relaid with grout joints, including concrete base. | |
| (M) | Furnishing and laying a 14-inch wearing surface and a 14-inch binder and concrete base and guaranteeing same for a period of five years after completion. | |
| (N) | Furnishing and laying artificial stone sidewalks and guaranteeing same for a period of five years after completion. | |
| (O) | Furnishing and laying artificial stone driveways and guaranteeing same for a period of five years after completion. | |
| (P) | Removing trees, etc. | |
| (Q) | Loam furnished, placed and seeded. | |
| (R) | Loam spaces graded and seeded. | |
| (S) | Sods taken up, stored and relaid. | |
| (T) | Loam furnished. | |
| (U) | Brick sidewalk relaid. | |
| (V) | Furnishing filling. | |
| (W) | Flagging crosswalks relaid with gravel joints. | |
| (X) | Furnishing and laying bituminous concrete binder and asphalt wearing surface on macadam foundation and guaranteeing same for a period of five years after completion. | |
| (Y) | Furnishing and laying brick block pavement, including concrete base, and guaranteeing same for a period of five years after completion. | |
| (Z) | Furnishing and laying wood block pavement and guaranteeing same for a period of five years after completion. | |
| (AA) | Furnishing and laying crushed stone. | |
| (BB) | Furnishing and laying artificial stone curb and guaranteeing same for a period of five years after completion. | |
| (CC) | Rail fences furnished and built. | |
| (DD) | Board fences furnished and built. | |

Granite Block Pavement.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|--|---|----------------------------------|----------------------------|--------------------------|--------------------------|
| 1, 2 Alexander street, from Bird street about 527 feet northerly, Dorchester, 1 Battery-march street, from Franklin street to Broad street; Beach street, from Harrison avenue to Atlantic avenue; Canal street, from Haymarket square to Causeway street; Clinton street, from Merchants row to Commercial street; Cross street, from Commercial street to Haymarket square; Devonshire street, from Adams square to Water street; Fulton street, from Blackstone street to Richmond street; Harrison avenue, from Kneeland street to Dover street; Haymarket square; Lincoln street, from Essex street to Beach street; McKinley street; Merrantile street, from Tremont street to Washington street; Washington street, from Haymarket square to Elm street; Albany street, from Kneeland street to Boston & Albany Railroad Bridge; Albany street, from Dover street to Northampton street, city proper; Columbia road, from Edward Everett square to Dudley street; Dorchester avenue, from Savin Hill avenue to Freeport street, Dorchester. | James Doherty..... Bernard E. Grant..... | June 16, 1916. Aug. 26, 1916. | Unfinished. Unfinished. | \$7,472 75 362,364 70 | \$6,170 04 90,636 02 |
| 1, 2 Anory street, from Centre street to Bradgon street; Washington street, from Morton street to Asticou road, West Roxbury. | James Doherty..... | Aug. 30, 1916. | Unfinished. | 28,124 98 | 6,856 59 |

1 Advertisèd and awarded to lowest bidder.

2 Work done under chapter 383, Acts of 1906.

Excavating and Grading.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|---|-----------------------|----------------|-------------------|-----------------|--------------------------|
| 1 Caledonian avenue, from Spring street about 210 feet southerly, West Roxbury. | Frank Drinkwater..... | Nov. 13, 1916. | Unfinished. | \$2,100 00 | \$306 00 |

1 Advertisèd and awarded to lowest bidder.

Furnishing Filling.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|---|-----------------------|-----------------|-------------------|-----------------|--------------------------|
| ¹ Morton street, from Norfolk street to Midland Division bridge, Dorchester. | William J. Barry..... | Sept. 12, 1916. | Unfinished. | \$1,035 00 | \$902 04 |
| Ralston street, from Dorchester avenue to Old Colony avenue, South Boston. | Frank J. Hannan..... | Jan. 2, 1917. | Unfinished. | 2,280 00 | Nothing. |

Bituminous Macadam Roadways.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|--|-----------------------|----------------|-------------------|-----------------|--------------------------|
| ¹ ² Brock avenue, from Washington street to Langley road; Langley road, from Brock avenue about 571 feet easterly; Brighton; Wensley street, from Bucknam street to Bickford avenue; Wyoming street, from Wabeno street to Humboldt avenue; Roxbury; Augustus avenue, from Metropolitan avenue to Ethel street; Cornell street, from Orange street to Colberg avenue; Granada avenue, from Metropolitan avenue to Ethel street; Patten street, from Hyde Park avenue to Bourne street; St. Rose street, from South street about 416 feet westerly; Vista street, from Augustus avenue to Malvern road, West Roxbury; Caspian way, from Sayin Hill avenue about 520 feet easterly; Downer avenue, from DeWolf street to Sawyer avenue; Rowell street, from Hancock street to Cushing avenue; Hill Top street, from Granite avenue to Hallet street, Dorchester. | Martino DeMatteo..... | Oct. 14, 1916. | Unfinished. | \$61,642 90 | \$5,124 62 |

¹ Advertised and awarded to lowest bidder.² Work done under chapter 393, Acts of 1906.

Artificial Stone Walks, Steps and Walls.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|---|--------------------|-----------------|-----------------------------|-----------------|--------------------------|
| 1, * Crown path, from Claybourne street to Washington street, Dorchester. | James Doherty..... | April 26, 1916. | Completed Nov. 4, 1916.... | \$2,839 26 | \$2,839 26 |
| 1, * Wait street, from Hillaide street to Saohem street, Roxbury. | James Doherty..... | April 27, 1916. | Completed Sept. 11, 1916... | 2,549 25 | 2,621 60 |

* Advertised and awarded to lowest bidder.

* Work done under chapter 393, Acts of 1906.

Miscellaneous.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|--|---|----------------|-----------------------------|-----------------|--------------------------|
| ¹ Repairing artificial stone sidewalks on any street in the city upon which the maintenance guaranty has expired. | Charles J. Jacobs Company..... | Feb. 3, 1916. | Completed Jan. 31, 1917.... | \$1,210 00 | \$535 10 |
| ² Erecting iron fence at subway under N. Y., N. H. & H. R. R. tracks at Rosindale station, West Roxbury. | P. J. Dinn & Co..... | March 7, 1916. | Completed May 23, 1916.... | 194 00 | 194 00 |
| ³ Repairing asphalt or bitulithic pavement in any street upon which the maintenance guaranty has expired. | Central Construction Company.. | May 12, 1916. | Completed Jan. 31, 1917.... | 43,300 00 | 30,314 74 |
| ^{1, 2} Sea walls and Haasam block pavement in Condor street, from Glendon street to East Eagle street, East Boston. | Bay State Dredging and Contracting Company. | May 22, 1916. | Completed Nov. 11, 1916.... | 17,348 85 | 17,121 79 |
| ³ Everton street, between Olney street and Geneva avenue, Dorchester. Removing trees. | John E. Gill..... | June 22, 1916. | Completed June 30, 1916.... | 350 00 | 350 00 |
| ⁴ Relaying granite block pavement in Dorchester avenue, between Old Colony avenue and Humboldt place, South Boston. | T. A. Gillespie Company..... | Oct. 5, 1916. | | | |
| ¹ Relaying tar concrete sidewalks in Waldeck street, northwesterly side, from the church property towards Lindsey street, Dorchester. | W. A. Murtfeldt Company..... | Oct. 19, 1916. | Unfinished..... | 375 00 | 0 00 |
| Privilege to maintain slope of Bryant street, Roxbury. | N. Y., N. H. & H. R. R. Co..... | Oct. 25, 1916. | | | |
| ² Erecting iron fence on wall, Medfield street, city proper. | P. J. Dinn & Co..... | Nov. 27, 1916. | Completed Dec. 16, 1916.... | 60 00 | 60 00 |

¹ Advertised and awarded to lowest bidder.² Only bid; not advertised.³ Work done under chapter 393, Acts of 1906.⁴ This contract was made by the Transit Commission. The Public Works Department to pay part of the cost of relaying the granite block pavement with grout joints.

HIGHWAY DIVISION.—SANITARY SERVICE.
Collecting and Removing House Offal.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|---|------------------------------|----------------|----------------------------|-----------------|--------------------------|
| ¹ East Boston district..... | Hugh H. Cannon..... | Feb. 3, 1916.. | Completed Jan. 31, 1917... | \$5,388 00 | \$4,864 17 |
| Brighton district..... | John A. & William Janse..... | Feb. 2, 1916.. | Completed Jan. 31, 1917... | 5,688 00 | 5,214 00 |
| ¹ West Roxbury district..... | Walter Griffin..... | Feb. 3, 1916.. | Completed Jan. 31, 1917... | 2,136 00 | 1,867 65 |
| ¹ Dorchester district..... | Bernard E. Grant..... | Feb. 2, 1916.. | Completed Jan. 31, 1917... | 23,328 00 | 21,022 25 |
| ¹ , ² Hyde Park district..... | William P. Nickerson..... | Feb. 2, 1916.. | Completed Jan. 31, 1917... | 1,380 00 | 991 00 |

¹ Advertised and awarded to lowest bidder.² Contract assigned to Charles Tate, October 16, 1916, and he was paid \$230.³ Advertised and awarded to second lowest bidder.

Collecting and Removing Ashes.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|--|-----------------------|-----------------|----------------------------|-----------------|--------------------------|
| ¹ East Boston district..... | Berry & McCarthy..... | Feb. 2, 1916.. | Completed Jan. 31, 1917... | \$10,878 80 | \$7,887 02 |
| ¹ Brighton district..... | Joseph McGreevey..... | Feb. 2, 1916.. | Completed Jan. 31, 1917... | 13,794 00 | 8,139 81 |
| ¹ West Roxbury district..... | John J. Moore..... | Feb. 2, 1916.. | Completed Jan. 31, 1917... | 6,980 00 | 6,380 00 |
| ¹ , ² Dorchester district..... | The Gore Company..... | Feb. 17, 1916.. | Completed Jan. 31, 1917... | 50,940 00 | 11,613 34 |
| ¹ Hyde Park district..... | John J. Moore..... | Feb. 2, 1916.. | Completed Jan. 31, 1917... | 3,480 00 | 3,190 00 |

¹ Advertised and awarded to lowest bidder.² Contract assigned to American Fidelity Company July 3, 1916, and they have been paid \$27,063.24.

Miscellaneous.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|---|----------------------------|-----------------|------------------------------|-----------------|--------------------------|
| ¹ , ⁴ Removing manure from the various stables and yards of the department. | J. N. Smith & Co. | Jan. 29, 1916.. | Completed Jan. 31, 1917... | * \$1 55 | \$927 80 |
| ¹ Furnishing combination street sprinkler, flushing and oil spreading motor trucks. | Bernard E. Grant. | Feb. 3, 1916.. | Completed Dec. 1, 1916. | † 18 50 | 12,684 07 |
| ² Moving wagon shed, Gibson street yard, Dorchester. | T. Ahern's Sons. | Aug. 30, 1916.. | Completed Sept. 22, 1916.... | 200 00 | 200 00 |
| ³ Electric wiring, Ward street receiving station, Roxbury. | Oliver S. Grant & Co. | Dec. 16, 1916.. | Unfinished. | 385 00 | Nothing. |

¹ Advertised and awarded to lowest bidder.
² Advertised and awarded to highest bidder.

³ Only bid; not advertised.
⁴ Paid to city.

* Per horse per year.
† Per day.

Contracts in Force Made in Previous Years.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|--|--|-----------------|-------------------|-----------------|--------------------------|
| Disposal of refuse for ten years. | Boston Development and Sanitary Company. | Feb. 1, 1912... | Unfinished. | \$1,432,000 00 | \$140,000 00 |

**HIGHWAY DIVISION.—STREET CLEANING AND OILING SERVICE.
Furnishing Carts for Watering and Oiling Streets.**

| District. | Awarded to | Dated. | Progress of Work. | Price per Cart per Day. | | Amount Expended in 1916. |
|---|--------------------------------|----------------|------------------------------|-------------------------|--------------|--------------------------|
| | | | | Two-horse. | Three-horse. | |
| No. 1, South Boston and Dorchester North. | Northern Construction Company. | March 8, 1916. | Completed Jan. 31, 1917. . . | \$4 90 | \$7 00 | \$3,519 80 |
| No. 2, East Boston and Breed's Island. | William Carr. | March 8, 1916. | Completed Jan. 31, 1917. . . | 5 00 | 6 00 | 642 50 |
| No. 3, Charlestown. | J. P. O'Riorden. | March 8, 1916. | Completed Jan. 31, 1917. . . | 5 10 | 6 00 | 1,672 80 |
| No. 4a, Brighton North. | A. J. & G. H. McMurtry. | March 8, 1916. | Completed Jan. 31, 1917. . . | 5 00 | 6 00 | 911 50 |
| No. 4b, Brighton South. | Bernard Malone. | March 8, 1916. | Completed Jan. 31, 1917. . . | 5 00 | 6 00 | 949 00 |
| No. 5, West Roxbury. | M. McGinnis & Co. | March 8, 1916. | Completed Jan. 31, 1917. . . | 5 21 | 6 50 | 2,534 13 |
| Noes. 6 and 9, Dorchester and Ashmont. | D. M. Biggs & Co. | March 8, 1916. | Completed Jan. 31, 1917. . . | 5 80 | 6 50 | 2,522 28 |
| No. 7, Roxbury South and Jamaica Plain. | Joseph Sprisler. | March 8, 1916. | Completed Jan. 31, 1917. . . | 5 00 | 6 00 | 4,032 39 |
| No. 8, South End and Roxbury North. | Joseph McGreevey. | March 8, 1916. | Completed Jan. 31, 1917. . . | 5 00 | 6 00 | 1,850 44 |
| No. 10, North and West Ends and Back Bay. | Northern Construction Company. | March 8, 1916. | Completed Jan. 31, 1917. . . | 4 90 | 7 00 | 4,981 53 |
| No. 11, Hyde Park. | Thomas H. Corrigan. | March 8, 1916. | Completed Jan. 31, 1917. . . | 4 75 | 4 75 | 840 39 |

† Advertised and awarded to lowest bidder.

Removing Snow and Ice.

| District. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|----------------------------|--------------------------------|----------------|--------------------------|----------------------------|--------------------------|
| 1 Snow District No. 1..... | Central Construction Company.. | Dec. 12, 1916. | Expires May 1, 1917..... | \$0 43 per cubic yard..... | \$2,150 00 |
| 1 Snow District No. 2..... | Bernard E. Grant..... | Dec. 12, 1916. | Expires May 1, 1917..... | 0 42 per cubic yard..... | 521 01 |
| 1 Snow District No. 3..... | Bernard E. Grant..... | Dec. 12, 1916. | Expires May 1, 1917..... | 0 45 per cubic yard..... | 800 33 |
| 1 Snow District No. 4..... | Bernard E. Grant..... | Dec. 12, 1916. | Expires May 1, 1917..... | 0 38 per cubic yard..... | 590 33 |
| 1 Snow District No. 5..... | Coleman Brothers..... | Dec. 12, 1916. | Expires May 1, 1917..... | 0 49 per cubic yard..... | 1,231 13 |
| 1 Snow District No. 6..... | Central Construction Company.. | Dec. 12, 1916. | Expires May 1, 1917..... | 0 40 per cubic yard..... | 1,588 40 |
| 1 Snow District No. 7..... | Michael H. Loonie..... | Dec. 12, 1916. | Expires May 1, 1917..... | 0 40 per cubic yard..... | 1,561 40 |

1Advertised and awarded to lowest bidder.

SEWER AND WATER DIVISION.—SEWER SERVICE.
Cleaning Catch-basins.

| Division. | Awarded to | Dated. | Progress of Work. | Price per Basin. | Amount Expended in 1916. |
|---|----------------------|---------------|--------------------------|---|--------------------------|
| 1 No. 1, north of Dover and Berkeley streets to the waterfront, East Boston and Charlestown. | John W. Collins..... | Feb. 1, 1916. | Completed Jan. 31, 1917. | North of Dover and Berkeley sts. \$3 19 East Boston..... 2 40 Charlestown..... 2 50 | \$3,689 67 |
| No. 2, south of Dover and Berkeley streets to Districts Nos. 4, 5 and 6, South Boston and Brighton. | Mark H. Lynch..... | Feb. 1, 1916. | Completed Jan. 31, 1917. | South of Dover and Berkeley sts. \$2 75 South Boston..... 2 00 Brighton..... 2 00 West Roxbury..... 2 25 Dorchester..... 2 50 Hyde Park..... 1 00 | 10,970 50 |
| No. 3, West Roxbury, Dorchester and Hyde Park. | | | | | |

1 Advertised and awarded to lowest bidder.

Sewerage Works.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost as per Estimated Quantities, not including Materials furnished by City. | Amount Expended in 1916. |
|---|-----------------------------|-----------------|-------------------------------|--|--------------------------|
| ' Frankfort street, between Prescott street and Neptune road; Neptune road, between Bennington street and B., R. B. & L. R. R., East Boston. | James J. Coughlan Company.. | Feb. 5, 1916. | Unfinished..... | \$32,886 40 | \$34,881 08 |
| ' St. Albans road, between Huntington avenue and Francis street, Roxbury. | James L. Pierce..... | April 22, 1916. | Completed July 11, 1916..... | 475 35 | 551 54 |
| ' Alexander street, from existing sewer about 635 feet south of Oleaner street, 102 feet southerly; Parker terrace, from Ashmont street about 190 feet southerly, Dorchester. | George J. Regan..... | April 27, 1916. | Completed June 7, 1916..... | 627 60 | 2,098 26 |
| ' Cummings road, between Corey road and Commonwealth avenue, Brighton. | George J. Regan..... | April 29, 1916. | Completed June 27, 1916..... | 2,496 00 | 2,555 79 |
| ' South End sewer improvement in Columbus avenue from Alley No. 815 to Wellington street; Wellington street, from Columbus avenue to Alley No. 531, city proper. | William Barrett & Co..... | April 29, 1916. | Completed July 27, 1916..... | 3,964 46 | 6,007 23 |
| ' Archdale road, westerly side, between Washington street and Whipple avenue, West Roxbury. | James L. Pierce..... | April 29, 1916. | Completed July 22, 1916..... | 639 00 | 1,868 43 |
| ' Payson avenue, between Hancock and Glendale streets, Dorchester. | James L. Pierce..... | May 10, 1916. | Completed June 19, 1916..... | 761 20 | 846 32 |
| ' Across Albany and East Dedham streets, between Albany and Thorn streets, city proper. | William Barrett & Co..... | May 11, 1916. | Completed Aug. 22, 1916..... | 5,399 10 | 8,866 06 |
| ' Loretto street, between Spring street and end of street, 460 feet northwesterly, West Roxbury. | James L. Pierce..... | May 20, 1916.. | Completed Sept. 13, 1916..... | 1,131 50 | 1,690 41 |

PUBLIC WORKS DEPARTMENT.

43

| | | | | | |
|---|------------------------|---------------|-------------------------------|-----------|-----------|
| Willow court, from Massachusetts avenue about 123 feet easterly from Field's court, Dorchester. | Michael H. Lounie..... | May 26, 1916. | Completed June 21, 1916..... | 1,106 00 | 1,452 22 |
| Rugby road, from Randolph road to Oakland street, Dorchester. | Antony Cafalo..... | May 26, 1916. | Completed July 7, 1916..... | 844 00 | 2,656 61 |
| Harold street, between Holworthy and Townsend streets; Holworthy street, from Harold street about 558 feet southeasterly, Roxbury. | Antony Cafalo..... | May 26, 1916. | Completed Jan. 11, 1917..... | 4,798 95 | 4,412 29 |
| Perham street, from Vermont street 310 feet north west of Ivory street; Dent street brook conduit in Alder street, between Vermont street and private land; Vermont street, between Dent street brook conduit and Temple street; Winslow street, between Dent street brook conduit and Perham street, West Roxbury. | Antony Cafalo..... | May 31, 1916. | Completed Nov. 15, 1916..... | 11,738 25 | 15,724 91 |
| Haydn and Brahma streets, between Nikiech avenue and Washington street, West Roxbury. | Louis Balboni..... | May 31, 1916. | Completed Sept. 19, 1916..... | 3,189 20 | 3,647 19 |
| South End sewer improvement in Shawmut avenue, between Union Park and Upton street; Upton street, between Shawmut avenue and Newland street; Newland street, between Upton street and Draper's lane, city proper. | M. H. Kelley..... | May 31, 1916. | Completed Aug. 31, 1916..... | 1,186 40 | 1,430 07 |
| Morton street, between Norfolk street and N. Y. N. H. & H. R. R. Midland Division; Wheatland avenue, between Norwell street and N. Y. N. H. & H. R. R., Dorchester. | George J. Regan..... | June 3, 1916. | Completed July 29, 1916..... | 1,023 20 | 4,810 38 |
| Gloucester street, between North Beacon and Garden streets, Brighton. | James L. Pierce..... | June 3, 1916. | Completed Nov. 2, 1916..... | 1,934 10 | 1,957 93 |

¹ Advertised and awarded to lowest bidder.

Sewerage Works.—Continued.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost as per Estimated Quantities, not Including Materials Furnished by City. | Amount Expended in 1916. |
|--|---------------------------|----------------|------------------------------|--|--------------------------|
| ¹ Commonwealth avenue, between St. Lukes and Fordham roads; Fordham road, between Commonwealth and Brighton avenues, Brighton. | John J. Lane..... | June 5, 1916. | Completed July 28, 1916..... | \$3,456 20 | \$5,139 44 |
| ¹ Canal street, between Market and Merrimac streets; Sudbury street, between Haymarket square and Portland street, city proper. | William Barrett & Co..... | June 14, 1916. | Completed Oct. 18, 1916..... | 11,372 75 | 17,237 67 |
| ¹ Foster street, from existing sewer 280 feet south of Washington street to 75 feet southerly; Cleveland circle and Chestnut Hill avenue, between Beacon street and the Brookline line, Brighton. | Michael H. Loomie..... | June 16, 1916. | Completed Aug. 7, 1916..... | 997 50 | 1,764 98 |
| ¹ Harvest street, between Willowwood and Lucerne streets; Train street, from 100 feet south of Boutwell street to Boutwell street, Dorchester; Rutledge road, from existing sewer about 160 feet westerly, Hyde Park. | George J. Regan..... | June 16, 1916. | Completed Oct. 23, 1916..... | 3,103 70 | 9,817 67 |
| ¹ East Seventh street, between G and H streets, South Boston. | V. Grande..... | June 16, 1916. | Completed July 23, 1916..... | 647 35 | 831 78 |
| ¹ Tremont entrance, southeasterly side, between Louis Prang street and point 565 feet southeast, Roxbury. | Antony Cefalo..... | June 20, 1916. | Completed Nov. 2, 1916..... | 7,304 70 | 16,644 31 |
| ¹ Westminster road, between Walnut park and Westminster avenue, Roxbury. | Anthony Baruffaldi..... | June 26, 1916. | Completed Aug. 6, 1916..... | 1,108 85 | 2,188 80 |

PUBLIC WORKS DEPARTMENT.

45

| | | | | | |
|---|-------------------------|----------------|-------------------------------|-----------|-----------|
| ¹ Gaffney street, between Commonwealth avenue and B. & A. R. R. and Gaffney street outlet, between Commonwealth avenue outlet near Cottage Farm bridge and Gaffney street, Brighton. | John J. Lane..... | June 26, 1916. | Completed Nov. 23, 1916..... | 4,282 70 | 10,003 55 |
| ¹ Brookline avenue, between Audubon road and Jersey street, Roxbury. | Peter W. Hill..... | June 27, 1916. | Unfinished..... | 11,287 50 | 10,441 40 |
| ¹ Cufflin street, between Tremont and Nonantum streets, Brighton. | Anthony Baruffaldi..... | June 27, 1916. | Completed Aug. 17, 1916..... | 1,550 75 | 1,575 18 |
| ¹ Patten street, between Wachusett and Bourne streets and outlet in Nathan road, West Roxbury. | William L. Dolan..... | June 27, 1916. | Completed Sept. 20, 1916..... | 2,777 00 | 3,459 42 |
| ¹ Oriole street, between Emmons road and Bellevue street, West Roxbury. | Antony Cefalo..... | July 3, 1916. | Completed Sept. 5, 1916..... | 1,015 00 | 1,184 89 |
| ¹ Canterbury street, between Hyde Park avenue and N. Y., N. H. & H. R. R.; Montvale street and outlet between Belgrade avenue and Belgrade street, West Roxbury. | Antony Cefalo..... | July 3, 1916. | Completed Aug. 15, 1916..... | 956 55 | 1,357 82 |
| ¹ Orange street, between West and Cornell streets; Cornell street, between Orange street and Colberg avenue, West Roxbury. | Frank Drinkwater..... | July 7, 1916. | Completed Oct. 11, 1916..... | 4,554 70 | 5,829 84 |
| ¹ Private land, between Chelmsford and Franconia streets; Franconia street, between Adams and Charlemont streets, Dorchester. | Antony Cefalo..... | July 18, 1916. | Completed Sept. 21, 1916..... | 1,426 00 | 1,537 71 |
| ¹ La Grange street, between Linnet and Shaw streets, West Roxbury | William L. Dolan..... | July 20, 1916. | Completed Sept. 26, 1916..... | 3,264 00 | 3,606 51 |
| ¹ Colonial road, between Commonwealth avenue and Euston road, Brighton. | George J. Regan..... | July 20, 1916. | Completed Aug. 14, 1916..... | 465 20 | 1,487 89 |
| ¹ Colon street, between Buckminster and Warren streets, Brighton. | George J. Regan..... | July 20, 1916. | Completed Sept. 16, 1916..... | 1,286 00 | 3,305 21 |

¹ Advertised and awarded to the lowest bidder.

Sewerage Works.—Continued.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost as per Estimated Quantities, not Including Materials Furnished by City. | Amount Expended in 1916. |
|--|------------------------|----------------|-------------------------------|--|--------------------------|
| ¹ Wachusett street, between Northbourne and Eldridge roads, West Roxbury. | William L. Dolan..... | July 20, 1916. | Completed Sept. 30, 1916..... | \$1,048 60 | \$1,205 45 |
| ¹ Richmond street, between Centre and Montview streets, Centre street, between Corey street and N. Y., N. H. & H. R. R.; Centre street, from Willow street to summit 150 feet east of Beech street, Tinsindale branch of Stony Brook, Section 2, in land of N. Y., N. H. & H. R. R.; Willow and Centre streets, West Roxbury. | William J. Barry..... | July 20, 1916. | Unfinished..... | 55,600 75 | 6,525 11 |
| ¹ Gainsborough street, between St. Botolph street and N. Y., N. H. & H. R. R., Roxbury. | Michael H. Loonie..... | July 24, 1916. | Completed Oct. 4, 1916..... | 2,124 83 | 2,700 89 |
| ¹ Clinton street, between Commercial street and Merchants row, city proper. | Timothy Coughlin..... | Aug. 9, 1916. | Completed Oct. 16, 1916..... | 1,736 19 | 3,938 81 |
| ¹ Roys street, between Lamartine street and Chestnut avenue, Roxbury. | James Barletta..... | Aug. 9, 1916. | Completed Aug. 25, 1916..... | 417 00 | 394 74 |
| ¹ Water street, between Garfield and East Glenwood avenues; East Glenwood avenue, between Water and Loring streets, Hyde Park. | Frank Drinkwater..... | Aug. 9, 1916. | Completed Dec. 9, 1916..... | 2,367 20 | 3,102 10 |
| ¹ Fruit street, between Charles and Blossom streets; Blossom street, between Fruit and Allen streets; North Grove street, between Fruit and Cambridge streets, city proper. | M. DeSisto..... | Aug. 19, 1916. | Unfinished..... | 11,562 88 | 10,313 35 |
| ¹ Gordon avenue, from Beaver street about 600 feet northwesterly, Hyde Park. | George J. Regan..... | Aug. 19, 1916. | Unfinished..... | 3,425 79 | 2,400 34 |

PUBLIC WORKS DEPARTMENT.

47

| | | | | | |
|---|---------------------------|----------------|------------------------------|-----------|-----------|
| 1 New England avenue and Bernard street, between Talbot avenue and Norfolk street, Dorchester. | Daddario & Booth..... | Aug. 19, 1916. | Completed Dec. 7, 1916..... | 12,014 50 | 12,712 80 |
| 1 Burlington avenue, between Brookline avenue and B. & A. R. R., Roxbury. | Anthony Baruffaldi..... | Aug. 19, 1916. | Unfinished..... | 3,905 85 | 5,200 68 |
| 1 Commonwealth avenue, between Ashby and Essex streets, Brighton. | Anthony Baruffaldi..... | Aug. 19, 1916. | Unfinished..... | 9,872 00 | 12,819 06 |
| 1 Auburn street, between Roslindale and Bellevue avenues, West Roxbury. | Frank Drinkwater..... | Aug. 19, 1916. | Completed Oct. 11, 1916..... | 535 00 | 1,143 11 |
| 1 Dorchester avenue, from Hancock street to Savin Hill avenue, Dorchester. | V. Grande..... | Aug. 19, 1916. | Completed Oct. 24, 1916..... | 2,303 50 | 3,248 98 |
| 1 Deerfield street, at Buck street, Roxbury... | William Barrett & Co..... | Aug. 19, 1916. | Unfinished..... | 6,733 50 | 3,268 29 |
| 1 Harrison avenue, between Kneeland and Dover streets, city proper. | William Barrett & Co..... | Aug. 19, 1916. | Unfinished..... | 15,483 00 | 18,108 34 |
| 1 Cross street, between Fulton and Commercial streets, city proper. | John F. Lynch..... | Aug. 23, 1916. | Unfinished..... | 2,051 50 | 2,342 21 |
| 1 Fulton street, between Richmond and Ferry streets; Barrett street, between Fulton and North streets, city proper. | John F. Lynch..... | Aug. 23, 1916. | Unfinished..... | 4,045 25 | 5,113 10 |
| 1 Albany street, between Kneeland street and B. & A. R. R., city proper. | William Barrett & Co..... | Aug. 23, 1916. | Completed Nov. 18, 1916..... | 12,494 95 | 14,907 68 |
| 1 Gove street, between Cottage and Venice streets, East Boston. | Anthony Baruffaldi..... | Aug. 26, 1916. | Completed Oct. 7, 1916..... | 1,372 54 | 2,383 16 |
| 1 Alley No. 914, between Jersey and Queensberry streets, Roxbury. | M. H. Kelley..... | Aug. 30, 1916. | Unfinished..... | 4,267 45 | 6,221 63 |
| 1 B and Seventh streets overflow extension, from N. Y. N. H. & H. R. R., about 130 feet westerly, South Boston. | John F. McCarthy..... | Aug. 31, 1916. | Unfinished..... | 11,506 75 | 15,496 91 |

1 Advertised and awarded to lowest bidder.

Sewerage Works.—*Concluded.*

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost as per Estimated Quantities, not Including Materials Furnished by City. | Amount Expended in 1916 |
|---|-----------------------|-----------------|------------------------------|--|-------------------------|
| 1 Levant street, from 100 feet east of Tebroc street about 140 feet easterly; Delano street, between Levant and Bowdoin streets, Dorchester. | John F. Lynch..... | Sept. 7, 1916. | Unfinished..... | \$603 85 | \$460 45 |
| 1 Academy Hill road, between Chestnut Hill and William Jackson avenues; William Jackson avenue, between Chestnut Hill avenue and Academy Hill road, Brighton. | George J. Regan..... | Sept. 12, 1916. | Unfinished..... | 2,730 50 | Nothing. |
| 1 Adams street, from Rosemont road about 180 feet southerly; Southwick street, between Freeport street and Neponset avenue, Dorchester. | Antony Cefalo..... | Sept. 12, 1916. | Completed Oct. 14, 1916..... | 1,537 00 | 1,538 01 |
| 1 Groveland street, between Glenmore and Manchester streets, Dorchester. | George J. Regan..... | Sept. 15, 1916. | Completed Nov. 3, 1916..... | 507 50 | 930 45 |
| 1 Moraine street, between Centre street and Pond View avenue; Halifax street, between South Huntington avenue and Ashcroft street, West Roxbury. | William L. Dolan..... | Sept. 28, 1916. | Completed Nov. 11, 1916..... | 4,080 00 | 4,702 98 |
| 1 Kenrick street, between Lake street and Brayton road, Brighton. | William L. Dolan..... | Oct. 3, 1916. | Unfinished..... | 2,939 50 | 2,697 06 |
| 1 La Grange street, from Glenham street about 90 feet southeast of Lasell street, West Roxbury. | Antony Cefalo..... | Oct. 4, 1916. | Completed Nov. 1, 1916..... | 1,321 30 | 1,525 43 |
| 1 Jeffries and Sumner streets, from Marginal street 250 feet east of Jeffries street, East Boston. | Antony Cefalo..... | Oct. 19, 1916. | Completed Dec. 2, 1916..... | 1,300 00 | 1,415 65 |

PUBLIC WORKS DEPARTMENT.

49

| | | | | | |
|---|------------------------|----------------|------------------------------|----------|----------|
| 1 Walbridge street, between Brainerd road and Commonwealth avenue, Brighton. | Michael H. Loonie..... | Oct. 19, 1916. | Completed Nov. 10, 1916..... | 806 00 | 754 89 |
| 1 Mt. Ida road, between Marie street and Homes avenue, Dorchester. | Timothy Coughlin..... | Oct. 19, 1916. | Completed Dec. 1, 1916..... | 922 00 | 1,434 61 |
| 1 Worley street, between Metropolitan sewer and Dwinell street; Hodgdon terrace, from Maple street about 200 feet westerly, West Roxbury. | V. Grande..... | Nov. 3, 1916. | Unfinished..... | 1,981 50 | 1,585 08 |
| 1 Florence street, between Westbourne road and Weyvern street; Weyvern street, between Florence street and Hyde Park avenue, West Roxbury. | William L. Dolan..... | Nov. 16, 1916. | Unfinished..... | 2,314 50 | Nothing. |
| 1 Estella street, from Morton street 270 feet westerly, Dorchester. | George J. Regan..... | Dec. 4, 1916. | Unfinished..... | 406 00 | 1,553 29 |
| 1 Lawrence avenue, from existing sewer about 65 feet southeast of Mascoma street about 95 feet southeasterly; Stoughton street, from existing sewer 347 feet southeast of Columbia road about 100 feet southeasterly, Dorchester. | Michael H. Loonie..... | Dec. 27, 1916. | Unfinished..... | 525 00 | Nothing. |
| 1 Wilcox road, between Beaumont street and Elm road; Sampson street, from Adams street about 295 feet easterly, Dorchester. | James J. Conway..... | Dec. 27, 1916. | Unfinished..... | 1,039 50 | Nothing. |
| 1 Wilton street, from Hyde Park avenue about 250 feet southeasterly; Randolph road, between Rock and Ridge roads, Dorchester. | Daddario & Booth..... | Dec. 27, 1916. | Unfinished..... | 2,075 00 | Nothing. |
| 1 Elven road, between Washington street and Stony brook, West Roxbury. | Antony Cefalo..... | Jan. 3, 1917. | Unfinished..... | 693 25 | Nothing. |
| 1 London street, between Decatur and Maverick streets, East Boston. | Antony Cefalo..... | Jan. 31, 1917. | Unfinished..... | 2,031 40 | Nothing. |

1 Advertised and awarded to the lowest bidder.

Miscellaneous.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|--|------------------------------------|-----------------|---------------------------|---|--------------------------|
| ¹ Repairing shed at the main drainage yard, Massachusetts avenue, Roxbury. | Boston Painting & Roofing Company. | Mch. 28, 1916. | Completed April 11, 1916. | \$315. | \$315 00 |
| ² Furnishing and driving spruce piles for sewerage works in Hoxworth street, from Walnut avenue to Harold street, Roxbury. | W. S. Rendle. | May 22, 1916. | ..... | \$480. | Nothing. |
| Permission to cross under land and tracks of the N. Y. N. H. & H. R. R., near D street, South Boston, for the purpose of constructing an overflow sewer. | N. Y. N. H. & H. R. R. Co. | June 10, 1916. | ..... | City to pay all cost of supporting and guarding tracks and roadbed and all expense occasioned by its maintenance or repairing. | Nothing. |
| ³ Agreement to rebuild Summer street sewer, from Estes place 235 feet southeasterly, city proper. | Boston Transit Commission. | Sept. 7, 1916. | ..... | ..... | ..... |
| ¹ Rebuilding catch-basin, Webster and Orleans streets, East Boston. | James J. Coughlan Company. | Sept. 16, 1916. | Completed Sept. 22, 1916. | \$80. | \$106 61 |
| ² Furnishing and installing wrought-iron screens for Telford street outlet at Charles river, Brighton. | W. A. Snow Iron Works, Inc. | Oct. 17, 1916. | Unfinished. | \$684. | Nothing. |
| ¹ Repairing roof pumping station, Union Park and Albany streets, city proper. | Boston Painting & Roofing Company. | July 18, 1916. | Completed Oct. 1, 1916. | \$300. | \$300 00 |
| Permission to build a circular cement concrete conduit along the right of way of the N. Y. N. H. & H. R. R. property from a point near Anawan avenue at Bellevue Station, westerly, to a point about opposite Willow street, West Roxbury. | N. Y. N. H. & H. R. R. Co. | Sept. 23, 1916. | ..... | City to pay all cost of supporting and guarding tracks and roadbed and all expenses occasioned at any time hereafter by reason of the laying, maintaining or repairing of said conduit. | ..... |
| ² Installing ventilating system, Summer Street Pumping Station. | B. F. Sturtevant Company. | Jan. 18, 1917. | Unfinished. | \$198 50. | Nothing. |

¹ Only bid; not advertised.² Invitation bids; awarded to lowest bidder.³ Contract for this work made by Boston Transit Commission, the Public Works Department to pay one half of the cost thereof up to and not exceeding a total cost of \$10,000.⁴ Work never done; piles not needed.

Pumping Station, Calf Pasture.

| Contract. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|---|------------------------------------|----------------|------------------------------|-----------------|--------------------------|
| 1 Furnishing 250 feet of chain and sixty-four scraper blades. | R. Minton Company..... | Mar. 29, 1916. | Completed June 15, 1916..... | \$455 86 | \$455 86 |
| 1 Furnishing and installing ventilators on boiler house. | Boston Painting & Roofing Company. | June 6, 1916. | Completed July 15, 1916..... | 322 00 | 322 00 |

1 Only bid; not advertised.

**HIGHWAY DIVISION.— WATER SERVICE.
Water Pipes.— Laying.**

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost as per Estimated Quantities, not Including Materials Furnished by City. | Amount Expended in 1916. |
|--|----------------------------|-----------------|---------------------------------|--|--------------------------|
| Wesleyan place, off Bromfield street, city proper. | Coleman Brothers | Feb. 1, 1916. | Completed Feb. 5, 1916 | \$319 00 | \$319 00 |
| Franconia street, between Adams and Charle- mont streets; Foss road, between Beaumont and Elm streets; Whitten street, between Clematis and Althea streets; Althea street, between Whitten and Centre streets; Green- wood street, at Elmo street; Lithgow street, between Talbot avenue and Wainwright street; Normandy street, between Intervale and Devon streets; Ripley street, between Vassar street and existing main, Dorchester. | Louis Balboni | April 11, 1916. | Completed June 16, 1916 | 2,595 23 | 2,717 72 |
| Westminster road, between Walnut park and Westminster avenue; Holworthy street, from Harold street 250 feet easterly; Cedric street, between Magazine and Langdon streets; Butler street, between Brookline avenue and the railroad; Randall street, between Harrison avenue and Fellows street; Hubert street, from Westminster road 100 feet easterly; Tremont entrance, between Huntington ave- nue and Ruggles street, Roxbury. | Thomas Russo & Co. | April 11, 1916. | Completed July 12, 1916 | 2,477 50 | 2,449 25 |
| Edinboro street, from Essex street 120 feet southerly; Hudson street, from Beach street 150 feet southerly; Washington street, from Laconia street 100 feet southerly; South street, from Beach street 100 feet southerly; India street, between India square and At- lantic avenue; Atlantic avenue, between India and Milk streets; Harrison avenue, between Harvard and Bonnet streets; Beacon street, between railroad bridge and Brookline ave- nue; Atlantic avenue, opposite Foster's Wharf, city proper | Thomas Burke | April 11, 1916. | Completed June 7, 1916 | 1,855 61 | 1,895 60 |

| | | | | | |
|--|----------------------------|-----------------|--------------------------------|----------|----------|
| Crowell, Wildwood and Kennabon streets, Dorchester; Lecher street, Gilmore terrace and Haydn street, West Roxbury; Warren avenue, Hyde Park. | John Guarino..... | April 13, 1916. | Completed June 26, 1916. | 2,035 50 | 2,312 57 |
| Harvard and Delhi streets, Dorchester; Greston road, West Roxbury; Dana and Easton avenues and Bridge street, Hyde Park. | James Barletta..... | April 29, 1916. | Completed Aug. 5, 1916. | 1,038 30 | 2,616 18 |
| Fulton street, from Richmond street 300 feet northerly; Sudbury street, between Portland and Friend streets; Friend street, between Sudbury and Washington streets; Oneida street, between Harrison avenue and Albany street; Lehigh street, from Albany street 200 feet easterly, city proper; Condon street, East Boston. | John A. Costello & Co..... | May 20, 1916. | Unfinished..... | 2,311 00 | 3,332 77 |
| Washington street, from Elven road to a point west of Whipple avenue; Archdale road, easterly from Washington street, West Roxbury. | M. DeSisto..... | May 20, 1916. | Completed Aug. 7, 1916..... | 1,749 85 | 1,814 53 |
| Lasell, La Grange, Temple, Ricker and Bruce streets and Hodgdon terrace, West Roxbury; Walbridge, Glencoe and Cypress streets; Brayton road and Faneuil terrace, Brighton; Agnes avenue, Hyde Park. | John Guarino..... | May 26, 1916. | Completed Sept. 29, 1916. | 2,548 00 | 3,160 12 |
| Harold street, between Harriahof and Townsend streets; Caspian way, between Savin Hill avenue and Castle Rock street; Rosemont road, southeasterly from Dorchester avenue, Dorchester; Neponset road, between Frankfort and Gould streets, East Boston; Bynner street, from Parkway 150 feet easterly; Castleton street, from Parkway 100 feet easterly; Parkton road, between Parkton road and Bynner street, West Roxbury. | Thomas Russo & Co..... | June 7, 1916. | Unfinished..... | 3,169 60 | 1,680 97 |
| Franconia street, from existing main 250 feet easterly; Chelmsford street, from existing main 180 feet easterly; Charlemont street, between Minot and Franconia streets; Alexander street, from Bird street 360 feet northerly; Sharp street, from Alliston street 200 feet easterly; Southwick street, between Neponset avenue and Freepoint street, Dorchester; Power House street, from K street 200 feet easterly, South Boston. | V. Grande..... | June 26, 1916. | Completed Aug. 24, 1916. | 1,632 30 | 1,513 86 |

¹ Advertised and awarded to lowest bidder.

² Invitation bids; awarded to lowest bidder.

³ Advertised and awarded to second lowest bidder.

Water Pipes.—Laying.—Continued.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost as per Estimated Quantities, not Including Materials Furnished by City. | Amount Expended in 1916. |
|---|-------------------------|----------------|-----------------------------|--|--------------------------|
| ¹ Freeland, Ogden and Collins streets, Dorchester; Centre, Farquhar, St. Rose, Saville and Bartlett streets and Fifth road, West Roxbury. | M. DeSisto..... | June 26, 1916. | Completed Oct. 9, 1916..... | \$2,377 80 | \$2,703 98 |
| ¹ Ronoke road, Hyde Park; Bowditch and Cedarwood roads, West Roxbury. | John Guarino & Son..... | July 20, 1916. | Completed Nov. 1, 1916.... | 1,458 50 | 1,373 85 |
| ¹ Brook avenue, Arlington street and Crescent circuit, south, Brighton. | John Guarino & Son..... | July 20, 1916 | Completed Sept. 16, 1916... | 1,308 40 | 1,407 60 |
| ¹ Chelsea street, between Brooks and Porter streets; Porter street, between Chelsea and Cottage streets; Cottage street, between Porter and Maverick streets, East Boston. | Anthony Baruffaldi..... | July 29, 1916. | Unfinished..... | 7,137 72 | 6,052 00 |
| ¹ Lincoln street, between Beach and Tufts streets; Harrison avenue, between Bristol and Randall streets; Fulton street, between Ferry and Clinton streets; Ota street, from Devonshire street to existing main, city proper. | John T. Shea, Jr..... | Aug. 11, 1916. | Completed Sept. 14, 1916... | 1,941 50 | 2,343 15 |
| Completing high pressure fire service distribution system in Merchants row, North, Furlace, Bedford, School, Franklin and Broad streets, city proper. | Coleman Brothers..... | Aug. 4, 1916. | Unfinished..... | 11,614 20 | 12,437 76 |
| ² Baywater street, between Washburn and Lillian streets, East Boston. | Hugh McNulty..... | Sept. 5, 1916. | Completed Sept. 14, 1916... | 294 00 | 334 36 |
| ¹ Harrison avenue, between Dover street and Broadway; Broadway, between Harrison avenue and Curve street; Curve street, between Broadway and Hudson street; Hudson street, between Curve and Kneeland streets; Kneeland street, between Tyler street and Atlantic avenue, city proper. | John T. Shea, Jr..... | Sept. 5, 1916. | Unfinished..... | 14,605 50 | 8,793 22 |

PUBLIC WORKS DEPARTMENT.

55

| | | | | | |
|---|----------------------------|-----------------|-----------------------------|----------|----------|
| ¹ Theodore, Leslie and Orlando streets, New Bedford road and Menton street, Dorchester; Upton street, Hyde Park. | M. DeSisto..... | Sept. 7, 1916. | Completed Nov. 22, 1916.... | 2,007 25 | 2,085 15 |
| ² Hyde Park avenue, Blanton and Carlford roads and along right of way near railroad line, between Blanton and Carlford roads; Wyvern and Hobson streets, West Roxbury. | Hugh McNulty..... | Sept. 12, 1916. | Completed Nov. 9, 1916.... | 2,094 10 | 2,271 37 |
| ¹ N. Y., N. H. & H. R. R. yard at Readville and Sprague streets, from railroad bridge to the Dedham line, Hyde Park. | M. DeSisto..... | Sept. 12, 1916. | Completed Nov. 1, 1916.... | 2,317 40 | 2,535 11 |
| ⁴ Dana avenue, over N. Y., N. H. & H. R. R., Hyde Park. | John A. Costello & Co..... | Aug. 21, 1916. | Completed Aug. 23, 1916.... | 243 00 | 243 00 |
| ¹ Auburn street, Arcadia road, Baker, Dent, Orange and West streets, West Roxbury; Groveland, Manchester, Menton and Morton streets, Dorchester. | James Barletta..... | Sept. 20, 1916. | Unfinished..... | 2,802 50 | 1,049 42 |
| ¹ Massachusetts avenue, between Beacon and Back street; Portland street, from Causeway street to existing main; Haven street, between Shawmut avenue and Rutland street, city proper; Westwood street, between Wales place and Richfield street, Dorchester; Wensley street, between Bucknam street and Bickford avenue, Roxbury; Clapp street, between Norfolk avenue and the railroad; Parkway, between Perkins street and Parkton road, West Roxbury. | V. Grande..... | Sept. 22, 1916. | Completed Nov. 29, 1916.... | 2,553 40 | 1,972 80 |
| ¹ George and Stimson streets and North avenue, West Roxbury. | Anthony Cafalo..... | Oct. 18, 1916. | Unfinished..... | 1,659 70 | 1,613 06 |
| ¹ Warren street, between Dudley and Washington streets; Washington street, between Warren and Palmer streets; Palmer street, between Washington street and Harrison avenue; Harrison avenue, between Dudley and Leonard streets; Kendrick street, between Harrison avenue and passageway; Faber street, between Warren street and existing gate, Roxbury. | M. DeSisto..... | Oct. 19, 1916. | Unfinished..... | 2,635 00 | 1,376 68 |

¹ Advertised and awarded to lowest bidder. ² Invitation bids; awarded to lowest bidder. ³ Advertised and awarded to second lowest bidder.
⁴ Only bid; not advertised.

Water Pipes.—Laying.—*Concluded.*

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost as per Estimated Quantities, not Including Materials Furnished by City. | Amount Expended in 1916. |
|---|---------------------------|----------------|----------------------------|--|--------------------------|
| ¹ Blue Hill avenue, Courtland road, Estella street, Greendale and Goodale roads, Lucerne and Seminole streets, Dorchester; Colon street and Hunnewell avenue, Brighton. | James Barletta..... | Oct. 26, 1916. | Unfinished..... | \$2,442 00 | \$1,531 62 |
| ¹ Washington street boulevard, between Hinsdale road and Washington Heights avenue, easterly, West Roxbury; Marie street and Lanark road, Dorchester. | John Guarino & Son..... | Nov. 2, 1916. | Unfinished..... | 2,015 00 | 2,524 40 |
| ¹ Dacia street, between Brookford and Dewey streets, Roxbury. | John Guarino & Son..... | Nov. 2, 1916. | Completed Nov. 11, 1916... | 634 00 | 524 38 |
| ¹ Verdun street, between Carruth and Codman streets; Carruth street, at Verdun street; Levant street, from existing main 100 feet easterly; Hall street, 130 feet easterly from Washington street; Southwick street, from Sewall street to Freeport street, Dorchester. | William Barrett & Co..... | Nov. 21, 1916. | Unfinished..... | 1,002 50 | 1,383 36 |
| ¹ Dunboy and Harriet streets and Waldo terrace, Brighton. | James Barletta..... | Dec. 4, 1916. | Completed Jan. 18, 1917... | 1,121 50 | 966 31 |
| ¹ Atlantic avenue, between Milk and South Market streets; State street, from existing main to Atlantic avenue; Causeway street, between Lancaster and Haverhill streets; Portland street, from existing main to Causeway street; Friend street, from existing main to Causeway street; Canal street, from existing main to Causeway street; Lancaster street, from Causeway street 200 feet easterly, city proper. | Antony Cefalo..... | Dec. 12, 1916. | Unfinished..... | 4,587 50 | Nothing. |
| ¹ Ashton, Fontenac and Livingstone streets, Dorchester; Acton and Upton streets, Hyde Park. | John Guarino & Son..... | Dec. 18, 1916. | Unfinished..... | 2,005 00 | Nothing. |

¹ Advertised and awarded to lowest bidder.

Water Pipes.—Relaying.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost as per Estimated Quantities, not Including Materials Furnished by City. | Amount Expended in 1916. |
|--|----------------------------|----------------|------------------------------|--|--------------------------|
| ¹ Commonwealth avenue, from Massachusetts avenue to Charlestown East; Burlington avenue, from Brookline avenue to the railroad; North Centre street, from Hanover street to North street; Rollins street, from Washington street to Harrison avenue; Northampton street, from Columbus avenue to Watson street; Watson street, from Northampton street to Camden street, city proper. | John A. Costello & Co..... | May 20, 1916. | Completed Aug. 4, 1916.... | \$2,299 00 | \$2,279 03 |
| ² Harvard place, off Washington street, city proper. | Thomas Russo & Co..... | May 19, 1916. | Completed May 29, 1916.... | 540 00 | 318 28 |
| ¹ Bardwell, Ballard, Custer, Woodman, Jamaica and St. Rose streets, West Roxbury. | Martino DeMatteo..... | Aug. 4, 1916. | Completed Sept. 27, 1916.... | 2,826 75 | 2,512 82 |
| ¹ Ivory street, between Temple and Perham streets; Perham street, between Ivory and Vermont streets, West Roxbury. | John Guarino & Son..... | Aug. 19, 1916. | Completed Oct. 10, 1916.... | 1,940 50 | 1,686 57 |
| ¹ Blackstone street, from Hanover street to Clinton street; Clinton street, from Blackstone street to Commercial street; Thacher street, between Washington and Prince streets, city proper. | Antony Cefalo..... | Nov. 23, 1916. | Unfinished..... | 2,823 00 | 1,169 18 |

¹ Advertised and awarded to lowest bidder.² Invitation bids; awarded to lowest bidder.

Miscellaneous.

| CONTRACT. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount Expended in 1916. |
|--|---|----------------|---------------------------|---|--------------------------|
| * Furnishing and delivering two wagon shanties for High Pressure Fire Service at the yard on Albany street, foot of East Canton street, city proper. | J. J. Walsh & Co..... | Mar. 15, 1916. | Completed July 1, 1916. | \$470..... | \$470 00 |
| * Erecting office building, High Pressure Fire Service, at the yard on Albany street, foot of East Canton street, city proper. | E. F. Hodgson Company..... | May 2, 1916. | Completed June 1, 1916. | \$324..... | 324 00 |
| † Excavating and refilling trenches and openings, setting and regulating boxes, establishing hydrants, gates, etc., in District No. 1, comprising Wards 21 to 26, inclusive. | Thomas Burke..... | May 16, 1916. | Completed Dec. 8, 1916. | \$6,799 25..... | 2,198 40 |
| † Excavating and refilling trenches and openings, setting and regulating boxes, establishing hydrants, gates, etc., in a portion of District No. 2, comprising Wards 5 to 20, inclusive. | Thomas Burke..... | May 16, 1916. | Completed Sept. 30, 1916. | \$14,306 25..... | 8,556 04 |
| Permission to lay and maintain a 12-inch water pipe over the tracks of the N. Y., N. H. & H. R. R., at Dana avenue, Hyde Park. | N. Y., N. H. & H. R. R. Co..... | June 16, 1916. | ..... | City to pay all cost of supporting and guarding tracks and roadbed, and all expense occasioned by its maintenance or repairing. | |
| * Excavating trenches in Woolson street, Dorchester, for the installation of water pipes. | M. DeSisto..... | Nov. 7, 1916. | Unfinished. | \$682 50..... | 601 75 |
| † Asbestos covering, water pipe, Dana avenue bridge, Hyde Park. | Norristown Magnesia and Asbestos Company..... | Nov. 21, 1916. | Completed Dec. 22, 1916. | \$372..... | 372 00 |
| † Tanning water pipe, castings, etc., from the South Bay yard to the High Pressure Fire Service yard. | Coleman Brothers..... | Nov. 27, 1916. | Completed Dec. 1, 1916. | \$320..... | 320 00 |
| * Excavating for and calling joints, for high pressure fire pipe and piling pipe at Albany street yard. | George J. Regan..... | Nov. 3, 1916. | Completed Dec. 23, 1916. | \$0 35 per hour. | 1,014 09 |

† Advertised and awarded to lowest bidder.

* Only bid; not advertised.

* Invitation bids; awarded to lowest bidder.

The following table shows the snowfall and rainfall since 1910:

Snowfall (inches).

| MONTH. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
|---------------|-------|-------|-------|-------|-------|-------|-------|
| January..... | 11.9 | 0.7 | 17.8 | 0.3 | 10.3 | 7.0 | 4.8 |
| February..... | 12.6 | 19.5 | 0.2 | 7.7 | 20.6 | 5.1 | 30.3 |
| March..... | 0.2 | ..... | 2.0 | 0.5 | 5.2 | T. | 33.0 |
| April..... | ..... | ..... | 0.5 | 1.4 | 2.0 | 6.1 | 4.2 |
| November..... | 1.4 | 0.3 | 0.3 | ..... | ..... | 0.2 | 0.7 |
| December..... | 8.1 | 3.7 | 9.2 | 0.9 | 4.1 | 6.7 | 9.5 |
| Totals..... | 34.2 | 24.2 | 30.0 | 10.8 | 42.2 | 25.1 | 82.5 |

Rainfall (inches).

| MONTH. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
|----------------|-------|-------|-------|-------|-------|-------|-------|
| January..... | 4.25 | 2.28 | 2.87 | 2.38 | 3.26 | 6.83 | 1.23 |
| February..... | 3.44 | 2.85 | 2.38 | 2.99 | 3.07 | 3.47 | 5.18 |
| March..... | 1.25 | 2.95 | 4.18 | 4.81 | 4.16 | T. | 3.20 |
| April..... | 2.22 | 2.28 | 3.07 | 4.77 | 5.87 | 1.86 | 4.51 |
| May..... | 1.02 | 0.35 | 4.04 | 3.22 | 2.78 | 1.64 | 2.83 |
| June..... | 4.89 | 3.67 | 0.27 | 0.64 | 1.40 | 1.39 | 5.04 |
| July..... | 1.15 | 4.65 | 5.16 | 2.69 | 2.64 | 8.85 | 5.67 |
| August..... | 0.98 | 4.17 | 1.94 | 2.86 | 3.20 | 5.63 | 2.19 |
| September..... | 2.14 | 2.95 | 1.67 | 2.51 | 0.21 | 0.69 | 1.90 |
| October..... | 1.14 | 2.27 | 1.00 | 6.04 | 1.54 | 2.82 | 0.94 |
| November..... | 3.75 | 4.29 | 2.61 | 2.15 | 2.72 | 2.14 | 1.67 |
| December..... | 2.10 | 3.07 | 5.36 | 3.05 | 3.46 | 3.94 | 3.00 |
| Totals..... | 28.33 | 35.78 | 34.55 | 38.11 | 34.31 | 38.76 | 37.36 |

In this rainfall is included the precipitation during the winter months, which equals one tenth of an inch to one inch of snowfall.

Area of Pavements.
The Following Table Shows Areas in Square Yards and Character of Pavements on Accepted Streets, February 1, 1917.

| District. | Asphalt. | Granite Block. | Wood Block. | Plank on Bridges. | Brick. | Concrete. | Bituthic. | Macadam. | Gravel. | Not Graded. | Totals. |
|--------------------------|-----------|----------------|-------------|-------------------|---------|-----------|-----------|-------------|---------|-------------|------------|
| Year 1915 report..... | 341,559 | 2,333,198 | 221,892 | 39,923 | 111,804 | ..... | 224,307 | 7,150,672 | 619,302 | 110,389 | 11,153,026 |
| Per cent..... | 3.06 | 20.92 | 1.99 | 0.36 | 1.00 | ..... | 2.01 | 64.12 | 5.55 | 0.99 | 100.00 |
| February 1, 1917. | | | | | | | | | | | |
| City Proper..... | 233,251 | 940,842 | 155,393 | 9,236 | 9,237 | ..... | 151,291 | 470,711 | 6,602 | 391 | 1,976,954 |
| Charlestown..... | 5,173 | 266,565 | 1,418 | 3,091 | 2,296 | 672 | ..... | 161,240 | 275 | 754 | 441,484 |
| East Boston..... | 1,865 | 143,229 | ..... | 1,699 | 950 | ..... | 558 | 504,423 | 30,545 | ..... | 683,269 |
| South Boston..... | 23,468 | 441,433 | 2,850 | 6,967 | 1,979 | ..... | 18,424 | 397,384 | 11,672 | 42,212 | 946,389 |
| Roxbury..... | 65,409 | 317,185 | 24,443 | 1,417 | 50,532 | 2,514 | 44,806 | 1,099,248 | 29,191 | 4,143 | 1,638,688 |
| West Roxbury..... | 15,401 | 46,503 | 583 | 2,181 | ..... | 3,025 | 31,742 | 1,427,192 | 96,145 | 28,201 | 1,653,973 |
| Dorchester..... | 43,661 | 172,934 | 37,376 | 5,579 | 48,208 | 1,327 | 31,912 | 1,817,930 | 112,574 | 23,425 | 2,294,926 |
| Brighton..... | 2,915 | 16,323 | 2,505 | 4,339 | ..... | 6,371 | 15,979 | 833,765 | 76,103 | 7,897 | 966,197 |
| Hyde Park..... | ..... | 1,633 | ..... | 5,302 | ..... | ..... | ..... | 346,202 | 238,426 | 21,548 | 613,131 |
| Totals..... | * 391,143 | † 2,346,667 | 224,568 | 39,811 | 113,202 | † 13,909 | ‡ 294,512 | ‡ 7,058,095 | 604,533 | 128,571 | 11,215,011 |
| Per cent..... | 3.49 | 20.92 | 2.00 | 0.35 | 1.01 | 0.12 | 2.63 | 62.94 | 5.39 | 1.15 | 100.00 |

Total area of pavements on public streets, 11,215,011 square yards.

NOTE.—In the above table the city is subdivided substantially on the boundary lines between the districts as they existed when annexed to Boston. Territory annexed from Brookline is included in city proper.

* Of this amount 774 square yards equal asphalt blocks.

† Of this amount 654,944 square yards equal granite block paving on concrete base and 1,127 square yards equal cobble.

‡ Of this amount 672 square yards equal Hassam concrete pavement, and 946 square yards equal Blome Granitoid concrete blocked pavement, and 1,250 square yards equal Roman road pavement.

§ Of this amount 1,832 square yards equal Enclurite and 16,355 square yards equal Topoka pavement.

|| Of this amount 1,832,387 square yards equal bituminous macadam.

‡‡ 363 square yards public alleys laid out under chapter 298 of the Acts of 1898 included in this table.

‡‡‡ 660 square yards public streets in charge of Park and Recreation Department included in this table.

‡‡‡‡ 48,474 square yards public streets in charge of the Commonwealth of Massachusetts included in this table.

In addition to this table there are 7,269 square yards of accepted foot passages.

Public streets laid out and discontinued by the Street Commissioners during the year show pavements increased 2.50 miles, or 65,684 square yards.

The taking of Otter street by the state — Metropolitan Park Commission — shows pavements decreased 0.04 mile, or 594 square yards.

Corrections to previous measurements on account of revisions and other causes show pavements increased 0.11 mile, or decreased 3,105 square yards.

Total net increase, 2.57 miles, or 61.985 square yards.

The rate of increase from year to year is shown in the following table:

| Miles. | | Miles. | | Miles. | |
|-----------|--------|-----------|--------|-----------|--------|
| 1859..... | 111.50 | 1886..... | 383.55 | 1902..... | 496.90 |
| 1871..... | 201.32 | 1887..... | 390.30 | 1903..... | 499.85 |
| 1872..... | 207.40 | 1888..... | 392.72 | 1904..... | 500.39 |
| 1873..... | 209.24 | 1889..... | 397.84 | 1905..... | 502.20 |
| 1874..... | 313.90 | 1890..... | 404.60 | 1906..... | 502.80 |
| 1875..... | 318.58 | 1891..... | 409.60 | 1907..... | 510.04 |
| 1876..... | 327.50 | 1892..... | 434.59 | 1908..... | 511.60 |
| 1877..... | 333.20 | 1893..... | 443.34 | 1909..... | 514.28 |
| 1878..... | 340.39 | 1894..... | 447.65 | 1910..... | 518.63 |
| 1879..... | 345.19 | 1895..... | 452.12 | 1911..... | 521.21 |
| 1880..... | 350.54 | 1896..... | 456.11 | 1912..... | 561.36 |
| 1881..... | 355.50 | 1897..... | 459.12 | 1913..... | 567.51 |
| 1882..... | 359.85 | 1898..... | 471.19 | 1914..... | 572.85 |
| 1883..... | 367.99 | 1899..... | 479.47 | 1915..... | 584.55 |
| 1884..... | 374.10 | 1900..... | 489.55 | 1916..... | 593.62 |
| 1885..... | 379.60 | 1901..... | 491.85 | 1917..... | 596.19 |

Length of Pavements.
The Following Table Shows Length in Miles and Character of Pavements on Accepted Streets, February 1, 1917.

| District. | Asphalt. | Granite Block. | Wood Block. | Plank on Bridges. | Brick. | Concrete. | Bitulithic. | Macadam. | Gravel. | Not Graded. | Totals. |
|--------------------------|----------|----------------|-------------|-------------------|--------|-----------|-------------|----------|---------|-------------|---------|
| Year 1915 report..... | 23.24 | 102.27 | 8.96 | 1.90 | 5.50 | ..... | 12.11 | 396.45 | 40.04 | 3.15 | 593.62 |
| Per cent..... | 3.91 | 17.23 | 1.51 | 0.32 | 0.93 | ..... | 2.04 | 66.79 | 6.74 | 0.53 | 100.00 |
| February 1, 1917. | | | | | | | | | | | |
| City Proper..... | 16.15 | 41.24 | 6.24 | 0.39 | 0.58 | ..... | 6.54 | 23.50 | 0.35 | 0.01 | 95.00 |
| Charlestown..... | 0.32 | 11.91 | 0.06 | 0.13 | 0.10 | 0.03 | ..... | 10.84 | 0.02 | ..... | 23.41 |
| East Boston..... | 0.11 | 6.73 | ..... | 0.11 | 0.04 | ..... | 0.03 | 23.68 | 1.46 | ..... | 32.16 |
| South Boston..... | 2.01 | 18.78 | 0.16 | 0.32 | 0.13 | ..... | 1.07 | 20.94 | 0.62 | 1.65 | 45.68 |
| Roxbury..... | 3.69 | 13.63 | 1.14 | 0.06 | 2.69 | 0.17 | 2.58 | 64.02 | 2.03 | 0.18 | 90.18 |
| West Roxbury..... | 1.00 | 1.73 | ..... | 0.11 | ..... | 0.25 | 1.82 | 85.79 | 6.66 | 0.44 | 97.80 |
| Dorchester..... | 2.87 | 8.17 | 1.46 | 0.24 | 1.94 | 0.09 | 1.88 | 106.38 | 6.83 | 0.53 | 130.39 |
| Brighton..... | 0.15 | 0.64 | 0.04 | 0.24 | ..... | 0.44 | 0.75 | 38.97 | 5.21 | ..... | 46.44 |
| Hyde Park..... | ..... | 0.08 | ..... | 0.30 | ..... | ..... | ..... | 18.79 | 15.72 | 0.24 | 35.13 |
| Totals..... | * 26.30 | † 102.91 | 9.10 | 1.89 | 5.48 | ‡ 0.98 | § 14.67 | \|\| 392.91 | 38.90 | 3.05 | 596.19 |
| Per cent..... | 4.41 | 17.26 | 1.53 | 0.32 | 0.92 | 0.16 | 2.46 | 65.90 | 6.53 | 0.51 | 100.00 |

Total length of pavements on public streets, 596.19 miles.

NOTE.— In the above table the city is subdivided substantially on the boundary lines between the districts as they existed when annexed to Boston. Territory annexed from Brookline is included in city proper.

* Of this amount 0.02 mile equals asphalt blocks.

† Of this amount 25.31 miles equal granite block paving on concrete base and 0.12 mile equals cobble

road pavement.

‡ Of this amount 0.03 mile equals Haasam concrete pavement, and 0.06 mile equals Blome granitoid concrete blocked pavement, and 0.08 mile equals Roman

road pavement.

§ Of this amount 0.09 mile equals Endurite and 0.94 mile equals Topeka pavement.

|| Of this amount 88.34 miles equal bituminous macadam.

¶ Of this amount 88.34 miles equal granite block paving on concrete base and 0.12 mile equals cobble

road pavement.

§ Of this amount 88.34 miles equal granite block paving on concrete base and 0.12 mile equals cobble

road pavement.

¶ Of this amount 88.34 miles equal granite block paving on concrete base and 0.12 mile equals cobble

road pavement.

§ Of this amount 88.34 miles equal granite block paving on concrete base and 0.12 mile equals cobble

road pavement.

|| Of this amount 88.34 miles equal granite block paving on concrete base and 0.12 mile equals cobble

road pavement.

¶ Of this amount 88.34 miles equal granite block paving on concrete base and 0.12 mile equals cobble

road pavement.

§ Of this amount 88.34 miles equal granite block paving on concrete base and 0.12 mile equals cobble

road pavement.

The following changes in carrying pavements in the tables have been made:

Cobble, formerly having columns in the tables, is added with granite block.

Hassam concrete pavement, Blome granitoid concrete blocked pavement and Roman road pavement, formerly added with macadam, are added with concrete.

Endurite, formerly added with macadam, is added with bitulithic.

The following changes in pavement were made during the year:

0.19 mile or 2,691 square yards granite block changed to asphalt.
 0.13 mile or 1,976 square yards granite block changed to wood block.
 0.00 mile or 202 square yards granite block changed to brick.
 0.01 mile or 331 square yards granite block changed to bitulithic.
 0.00 mile or 134 square yards brick changed to granite block.
 0.02 mile or 633 square yards brick changed to wood block.
 0.00 mile or 25 square yards bitulithic changed to asphalt.
 0.70 mile or 13,409 square yards macadam changed to asphalt.
 0.34 mile or 5,621 square yards macadam changed to granite block.
 0.00 mile or 1,963 square yards macadam changed to brick.
 0.63 mile or 8,753 square yards macadam changed to concrete.
 1.18 miles or 45,310 square yards macadam changed to bitulithic.
 0.86 mile or 15,115 square yards macadam changed to Topeka.
 2.05 miles or 30,815 square yards gravel changed to asphalt.
 0.58 mile or 8,916 square yards gravel changed to granite block.
 0.15 mile or 1,970 square yards gravel changed to concrete.
 0.31 mile or 4,639 square yards gravel changed to bitulithic.
 0.08 mile or 740 square yards gravel changed to Topeka.
 0.10 mile or 1,536 square yards gravel changed to macadam.
 0.17 mile or 2,470 square yards not graded changed to asphalt.
 0.01 mile or 641 square yards not graded changed to granite block.
 0.00 mile or 500 square yards not graded changed to Topeka.
 0.00 mile or 1,937 square yards not graded changed to macadam.
 0.18 mile or 3,878 square yards not graded changed to gravel.

Streets laid out or discontinued by the Street Commissioners during the year show:

Granite block increased 0.00 mile or 1,473 square yards.
 Macadam decreased 0.03 mile or 000 square yards.
 Gravel increased 2.14 miles or 34,022 square yards.
 Not graded increased 0.39 mile or 30,189 square yards.

The taking of Otter street by the state — Metropolitan Park Commission — shows:

Asphalt decreased 0.03 mile or 523 square yards.
 Macadam decreased 0.01 mile or 71 square yards.

Corrections on account of revisions and other causes show:

Asphalt decreased 0.02 mile or increased 4 square yards.
 Asphalt blocks increased 0.00 mile or 693 square yards.
 Granite block increased 0.10 mile or 2,324 square yards.
 Cobble decreased 0.06 mile or 440 square yards.
 Wood block decreased 0.01 mile or increased 67 square yards.
 Plank decreased 0.01 mile or 112 square yards.
 Concrete increased 0.03 mile or 318 square yards.
 Bitulithic increased 0.03 mile or 1,779 square yards.
 Macadam increased 0.37 mile or decreased 1,124 square yards.
 Gravel decreased 0.19 mile or 4,053 square yards.
 Not graded decreased 0.13 mile or 2,561 square yards.

LIST OF PERSONAL PROPERTY ON HAND JANUARY 31, 1917, AND
ESTIMATED VALUE OF SAME, ALLOWING FOR DEPRECIATION.

Central Office.

| | |
|-----------------------------------|-------------------|
| 1 automobile | \$1,000 00 |
| Robes | 15 00 |
| Supplies for automobile | 25 00 |
| | <hr/> |
| | <u>\$1,040 00</u> |

Bridge Service.

| | |
|---|--------------------|
| 5 horses | \$1,250 00 |
| 5 wagons | 250 00 |
| 4 buggies | 150 00 |
| 6 harnesses | 85 00 |
| 8 blankets | 10 00 |
| 4 robes | 15 00 |
| 3 automobiles | 1,200 00 |
| 1 auto truck | 1,000 00 |
| Supplies, tools and machinery | 7,500 00 |
| | <hr/> |
| | <u>\$11,460 00</u> |

Ferry Service.

| | |
|---|---------------------|
| 7 ferryboats | \$208,995 00 |
| Supplies, tools and machinery | 15,364 00 |
| | <hr/> |
| | <u>\$224,359 00</u> |

Lighting Service.

| | |
|----------------------------------|---------------------|
| 10,260 lamp-posts | \$102,600 00 |
| 295 inverted gas lamps | 750 00 |
| 295 automatic lighters | 2,250 00 |
| 246 post extensions | 1,100 00 |
| 300 lamp brackets | 275 00 |
| 1 lot lamp accessories | 50 00 |
| 1 automobile | 100 00 |
| 1 robe | 10 00 |
| | <hr/> |
| | <u>\$107,135 00</u> |

Paving Service.

| | |
|---------------------------|------------|
| 252 harnesses | \$2,520 00 |
| 8 automobiles | 2,100 00 |
| 266 blankets | 266 00 |
| 22 buggies | 660 00 |
| 11 pungs | 200 00 |
| | <hr/> |
| Carried forward | \$5,746 00 |

PUBLIC WORKS DEPARTMENT.

65

| | |
|--|---------------------|
| <i>Brought forward</i> | \$5,746 00 |
| 6 sleighs | 150 00 |
| 14 jiggers | 550 00 |
| 20 wagons | 1,000 00 |
| 13 street watering carts | 1,800 00 |
| 7 road scrapers | 2,800 00 |
| 87 dump carts — 20 double, 67 single | 8,000 00 |
| 113 horses | 33,900 00 |
| 40 snow levels | 2,600 00 |
| 12 section rollers | 1,000 00 |
| 12 steam rollers | 16,000 00 |
| 34 desks | 340 00 |
| 1,493 picks | 750 00 |
| 1,849 shovels | 925 00 |
| Supplies, tools, machinery, surveying instruments, engineers' supplies, etc. | 45,000 00 |
| | <hr/> |
| | <u>\$120,561 00</u> |

Sanitary Service.

| | |
|--|---------------------|
| 3 automobiles | \$1,500 00 |
| 4 auto trucks | 6,300 00 |
| 287 horse blankets | 287 00 |
| 18 buggies | 450 00 |
| 218 carts | 21,800 00 |
| 353 shovels | 265 00 |
| 219 harnesses | 3,200 00 |
| 195 horses | 58,500 00 |
| 94 wagons | 5,640 00 |
| 17 desks | 150 00 |
| 9 sleighs | 90 00 |
| 72 pungs and sleds | 1,440 00 |
| 2 scows | 100 00 |
| Supplies, tools, machinery, etc. | 10,000 00 |
| | <hr/> |
| | <u>\$109,722 00</u> |

Street Cleaning and Oiling Service.

| | |
|---------------------------------------|-------------|
| 5 automobiles and 2 trucks | \$6,200 00 |
| 130 carts | 13,000 00 |
| 15 buggies | 300 00 |
| 27 street watering carts | 2,500 00 |
| 9 wagons | 700 00 |
| 248 harnesses | 3,800 00 |
| 184 horses | 55,200 00 |
| 45 street sweeping machines | 9,000 00 |
| 12 flushing machines | 4,500 00 |
| 118 push carts | 1,180 00 |
| | <hr/> |
| <i>Carried forward</i> | \$96,380 00 |

| | |
|---|---------------------|
| <i>Brought forward</i> | \$96,380 00 |
| 720 street sweeping brooms | 200 00 |
| 659 shovels | 330 00 |
| 634 picks | 320 00 |
| 9 snow ploughs and 19 road machines | 7,500 00 |
| Supplies, tools, machinery, etc. | 10,000 00 |
| | <hr/> |
| | \$114,730 00 |

Sewer Service.

| | |
|---|---------------------|
| 611 picks | \$300 00 |
| 6 automobiles | 2,000 00 |
| 29 horses | 8,700 00 |
| 22 wagons | 1,100 00 |
| 12 buggies | 250 00 |
| 15 carts | 1,500 00 |
| 49 harnesses | 750 00 |
| 71 blankets | 70 00 |
| 10 sleighs | 80 00 |
| 284 shovels | 142 00 |
| 97 pails | 25 00 |
| Derricks, centrifugal pumps, dynamo, boilers, engineers' tools, machinery, instruments and supplies, etc. | 450,000 00 |
| | <hr/> |
| | \$464,917 00 |

Water Service.

| | |
|---|---------------------|
| 8 automobiles, 7 small and 3 large trucks | \$13,500 00 |
| 42 horses | 12,600 00 |
| 38 wagons | 1,900 00 |
| 8 huggies | 200 00 |
| 3 sleighs | 50 00 |
| 11 pungs | 100 00 |
| Shovels, picks and miscellaneous stock, consisting of all kinds and sizes of iron water pipe, meters, hydraulic machinery, boiler, hay and grain | 350,000 00 |
| | <hr/> |
| | \$378,350 00 |

Real Property in Charge of the Bridge and Ferry Division.— (Bridge Service.)

| LOCATION. | ESTIMATED VALUE OF LAND. | | Estimated Value of Buildings. | Total Value. |
|---|---|------------|-------------------------------|--------------|
| | Per Foot. | Total. | | |
| SOUTH YARD AND STABLE. | | | | |
| 170 Broadway extension, South Boston, 5,516 feet of land on Broadway extension and Dorchester avenue, on which is a brick building containing an office, workshop and stable; 948 square feet of this land was taken in 1912 for a convenience station. | \$1 75 | \$9,600 00 | \$15,000 00 | \$24,600 00 |
| LOCATION. | | | | |
| Estimated Value of Buildings. | | | | |
| BROADWAY BRIDGE. | | | | |
| Draw house and one storehouse..... | Draw house, \$800; storehouse, \$200..... | | | \$1,000 00 |
| CHARLESTOWN BRIDGE. | | | | |
| Draw house, electrical power room and six storehouses *..... | Draw house, \$3,000; power room, \$1,000..... | | | 4,000 00 |
| CHELSEA NORTH BRIDGE. | | | | |
| Draw house..... | \$300..... | | | 300 00 |

* Five leased to M. P. Coleman for \$1,265 per year.

Real Property in Charge of the Bridge and Ferry Division.— (Bridge Service.)— *Concluded.*

| LOCATION. | Estimated Value of Buildings. | Total Value. |
|--|--|--------------|
| CHELSEA SOUTH BRIDGE. | | |
| Draw house, engine house and surface draw house | Draw house, \$1,500; engine house, \$100 | \$1,600 00 |
| CHELSEA STREET BRIDGE. | | |
| Draw house | Draw house, \$1,800 | 1,800 00 |
| CONGRESS STREET BRIDGE. | | |
| Draw house, storehouse and two shelter houses | Draw house, \$1,000; storehouse, \$100; shelter house, \$500. | 1,600 00 |
| DOVER STREET BRIDGE. | | |
| Draw house and two shelter houses | Draw house, \$1,000; shelter houses, \$500 | 1,500 00 |
| DORCHESTER AVENUE BRIDGE. | | |
| Draw houses, tool sheds, two motor houses and one controller house | Draw house, \$1,000; motor houses, \$300; tool house, \$200; controller house, \$25. | 1,525 00 |
| GRANITE AVENUE BRIDGE. | | |
| Tool house and controller house | Tool house, \$100; controller house, \$100 | 200 00 |
| L STREET BRIDGE. | | |
| Draw house and engine house | Draw house, \$1,000; engine house, \$500 | 1,500 00 |

| | | | |
|---|---|--|----------|
| MALDEN BRIDGE. | | | |
| Draw house..... | \$2,000..... | | 2,000 00 |
| MERRIMAN STREET BRIDGE. | | | |
| Draw house and tool house..... | Draw house, \$2,500; tool house, \$100..... | | 2,600 00 |
| NEPONSET BRIDGE. | | | |
| Tool house..... | \$150..... | | 150 00 |
| NORTHERN AVENUE BRIDGE. | | | |
| Draw house, containing a power room and storage room for compressed air and tool house..... | Draw house, \$4,500; tool house, \$100..... | | 4,600 00 |
| SUMMIT STREET BRIDGE. | | | |
| Draw house, controller house, two shelter houses and tool house..... | Draw house, \$3,000; controller house, \$250; shelter houses, \$500; tool house, \$100..... | | 3,850 00 |
| WARREN BRIDGE. | | | |
| Stable, draw house, containing an engine room and boiler room and a tool house..... | \$3,500..... | | 3,500 00 |
| WARREN AVENUE BRIDGE TO WATERTOWN. | | | |
| Tool house..... | \$200..... | | 200 00 |

Real Property in Charge of the Bridge and Ferry Division.—(Ferry Service.)

| LOCATION. | ESTIMATED VALUE OF LAND. | | Estimated Value of Buildings. | Total Value. |
|--|--|-------------|-------------------------------|--------------|
| | Per Foot. | Total. | | |
| South Ferry, East Boston side, located at the termination of Lewis street. On these premises are one headhouse with canopies, one workshop for carpenters, machinists and blacksmiths, one storehouse, one coal pocket, three piers which form the two slips, two drops and tanks, one wharf and dock. | * 33,196 at \$1 75 † 4,700 at 2 00 ‡ 16,879 at 1 50 † 2,000 at 1 75 | \$86,300 00 | \$43,000 00 | \$139,300 00 |
| South Ferry, Boston side, located at the termination of Eastern avenue. On these premises are one headhouse with canopies, one gate room, three piers which form the two slips and two drops and tanks. | 2 00 | 51,100 00 | 75,000 00 | 126,100 00 |
| North Ferry, East Boston side, located at the termination of Border street. On these premises are one headhouse with canopies, one boiler, one coal pocket, three piers which form the two slips and two drops and tanks. | † 18,876 at 2 00 ‡ 42,262 at 1 75 | 111,800 00 | 58,000 00 | 169,800 00 |
| North Ferry, Boston side, located at the termination of Battery street. On these premises are one headhouse with canopies, one gate room, three piers which form the two slips and two drops and tanks. | † 1,051 at 3 50 ‡ 34,900 at 2 00 | 106,000 00 | 69,000 00 | 175,000 00 |
| † Eastern avenue, No. 60, adjoining South Ferry Headhouse, Boston side. Upon this lot is a house and office building owned by Patrick J. Connolly. | | | | |

* Wharfs and docks.

† Solid.

‡ Land leased to Patrick J. Connolly for \$200 per year.

Real Property in Charge of the Highway Division.—(Lighting Service.)

| LOCATION. | Estimated Value of Land. | Estimated Value of Buildings. | Total Value. |
|---|--------------------------|-------------------------------|--------------|
| Lot of land, containing 8,000 square feet at 690 Albany street. | \$10,000 00 | \$3,000 00 | \$13,000 00 |

Real Property in Charge of the Highway Division.—(Paving Service.)

| LOCATION. | ESTIMATED VALUE OF LAND. | | Estimated Value of Buildings. | Total Value. |
|--|--------------------------|------------|-------------------------------|--------------|
| | Per Foot. | Total. | | |
| SOUTH BOSTON. | | | | |
| Columbia road, corner of H street, stable, carriage house, shed, tool house and office built by the city on land containing 12,017 square feet, rented from William H. Hart. | \$0 40 | \$4,800 00 | \$900 00 | \$5,700 00 |
| Columbia road, corner Hamlin street, lot of land used for storage purposes, containing 6,710 square feet, rented from Charles P. Mooney, agent. | 25 | 1,700 00 | ..... | 1,700 00 |
| EAST BOSTON. | | | | |
| East Eagle street, corner Glendon street, sheds, stable and office building erected by the city on wharf property containing 328,700 square feet, leased in 1915 from Renton Whidden for a term of one year, for the sum of \$1,800. This property is used jointly with the Sewer, Sanitary, Street Cleaning and Oiling Services.* | ..... | 129,700 00 | 13,300 00 | 143,000 00 |
| CHARLESTOWN. | | | | |
| Medford street, foot of Elm street, wharf property containing 44,700 square feet (Sur. Prog. 968), owned by the city. Upon this lot are a shed, stable and office building. | 90 | 41,100 00 | 8,500 00 | 49,600 00 |
| BRIGHTON. | | | | |
| Chestnut Hill avenue, ledge lot containing 569,776 square feet (L 1,630), purchased in 1882 by the city. Upon this lot are stone crusher, stable, shed and office building and oil plant. | 15 | 79,800 00 | 11,000 00 | 90,800 00 |

* Expired January 31, 1917.

Real Property in Charge of the Highway Division.—(Paving Service.)—Concluded.

| LOCATION. | ESTIMATED VALUE OF LAND. | | Estimated Value of Buildings. | Total Value. |
|---|--------------------------|-------------|-------------------------------|--------------|
| | Per Foot. | Total. | | |
| WEST ROXBURY. | | | | |
| Child street, lot of land containing 43,024 square feet, owned by the city. Upon this lot are sheds, stable and office building. (See Sewer Service.) | \$0 45 | \$19,300 00 | \$3,500 00 | \$22,800 00 |
| Morton street, near Canterbury street, lot of land containing 14,484 square feet, owned by the city and used for storage purposes. | 10 | 1,400 00 | ..... | 1,400 00 |
| Centre street, rear of 1932, lot of land used for storage purposes, hired for \$180 per year. | | | | |
| DORCHESTER. | | | | |
| Hancock street, opposite Bowdoin street, lot of land known as the almshouse lot, containing 104,132 square feet, which belonged to the town of Dorchester at the time of annexation. Upon this land are two stables, office, shed and tool house, used in part by Street Cleaning Service. | 18 | 19,000 00 | 8,000 00 | 27,000 00 |
| Downer avenue, lot of land containing 35,300 square feet, was purchased in 1871 to protect the almshouse lot. (Seven lots.) | 8c. and 10c. | 3,300 00 | ..... | 3,300 00 |
| Codman street, ledge lot containing 299,000 square feet, was purchased in 1870. Upon this lot is a shed containing steam engine and stone crusher, also a stable and tool house; 111,423 square feet additional bought in 1907 by the city. | 05 | 20,600 00 | 3,000 00 | 23,600 00 |
| ROXBURY. | | | | |
| Highland street, lot of land containing 195,129 square feet, owned by the city. Upon this lot is a large brick stable erected in 1873-74 and used by the Sanitary, Street Cleaning and Paving Services; also a brick building used as a blacksmith shop and a shed for storage purposes.* (See Sanitary Service.) | 40 | 78,100 00 | 51,000 00 | 129,100 00 |

SOUTH END.

Albany street, No. 636, opposite Sharon street, wharf lot, containing 63,200 square feet, owned by the city. Upon this lot are stables, office, blacksmith and carpenter shops.

Wharf lot adjoining the above, containing 39,511 square feet, owned by the city and used for storage purposes and receiving station for Sanitary Service. These wharves are owned by the city.

Massachusetts avenue, near Magazine street, lot of land containing 1,452,628 square feet, rented from New York, New Haven & Hartford Railroad Company and used for storage purposes.*

NORTH END.

Commercial street, No. 521, wharf lot, containing 23,667 square feet, owned by the city. Upon this lot is a stable, shed and office building.

HYDE PARK.

Hyde Park avenue, lot containing 18,773 square feet, owned by the city. On this lot is an office, stable and shed. Portion of this lot leased to William R. Murphy for \$180 per year.†

| | | | | |
|----|----|--------------|-----------|--------------|
| 1 | 25 | 79,000 00 | 1,800 00 | 80,800 00 |
| 90 | | 35,800 00 | 6,200 00 | 42,000 00 |
| 80 | | 1,162,100 00 | 24,900 00 | 1,187,000 00 |
| 2 | 35 | 55,300 00 | 15,700 00 | 71,000 00 |
| 1 | 00 | 18,800 00 | 22,200 00 | 41,000 00 |

* These estates are only partly occupied by City of Boston.

† These estates are only partly occupied by the Paving Service.

Real Property in Charge of the Highway Division.—(Sanitary Service.)

| LOCATION. | ESTIMATED VALUE OF LAND. | | Estimated Value of Buildings. | Total Value. |
|--|--|-------------------|-------------------------------|--------------|
| | Per Foot. | Total. | | |
| SOUTH BOSTON. | | | | |
| H and Second streets, stable and sheds, containing 8,590 square feet. Leased from E. M. & M. J. Mahoney. | 30c. and 40c..... | \$3,800 00 | \$2,900 00 | \$6,700 00 |
| DORCHESTER. | | | | |
| South street, near Freeport street, lot of land taken in 1912 for refuse transfer station. Completed January 4, 1913. | 37,990 feet valued as part of 78,458 feet at \$0.08. | About \$3,000 00 | 71,333 00 | 74,333 00 |
| ROXBURY. | | | | |
| Massachusetts avenue and Southampton street, weighing shed, containing about 2,300 square feet of land, leased from the Boston Consolidated Gas Company at \$10 dollars per month. | | | | |
| Ward street, northerly side, near N. Y., N. H. & H. R. R., containing 12,500 square feet. See letter of Street Commissioners, January 6, 1914. | 35,553 square feet at \$0.30 | About \$10,700 00 | 5,000 00 | 15,700 00 |
| Highland street, situated on the old almshouse block, containing 81,082 square feet. Upon this lot are stable, sheds, carriage house, oil plant, etc. A part of this stable and lot is used by the Paving Service and Street Cleaning and Oiling Service. * | ..... | ..... | ..... | * |
| SOUTH END. | | | | |
| Albany street, No. 650, containing 90,800 square feet. Upon this lot are stables, buildings, sheds, veterinary hospital, blacksmith, wheelwright, paint and harnessmakers' shops, also a horseshoeing shop, used in part by the Street Cleaning and Sewer Service. | ..... | 114,000 00 | 29,000 00 | 143,000 00 |

| | | | | |
|--|--|------------|-----------|------------|
| Albany street, No. 636, refuse transfer station, which was completed March 21, 1913.* | | | | |
| North Grove street, stables, sheds, etc., containing 45,152 square feet. On May 11, 1896, a horseshoeing shop was established, used in part by the Street Cleaning and Oiling Service. | \$2.25 | 101,600 00 | 62,500 00 | 164,100 00 |
| NORTH END. | | | | |
| Port Hill Wharf, containing 20,750 square feet and used as a dumping station for the city's garbage and refuse. On this wharf a refuse transfer station was erected in 1912. | 14,150 feet at \$12; 2,800 feet at \$3; 3,800 feet at \$1.50. | 183,900 00 | 1,000 00 | 184,900 00 |

* See Paving Service.

Real Property in Charge of the Highway Division.—(Street Cleaning and Oiling Service.)

| LOCATION. | ESTIMATED VALUE OF LAND. | | Estimated Value of Buildings. | Total Value. |
|--|--------------------------|-------------|-------------------------------|--------------|
| | Per Foot. | Total. | | |
| SOUTH BOSTON. Yard and stable at 124 Old Harbor street, corner of Columbia road, leased by the city from D. W. Creed at \$75 per month. | | | | |
| EAST BOSTON. Part of stable on East Eagle street. (See Paving Service.) | | | | |
| CHARLESTOWN. Part of stable at 263 Rutherford avenue, office building, Rutherford avenue; stable at 245-249 Rutherford avenue, now occupied under lease for \$600 per year by Timothy F. Callahan. | \$0 60 | \$17,700 00 | \$8,300 00 | \$26,000 00 |
| ROXBURY. Oil plant and part of stable on Highland street. (See Sanitary Service.) | | | | |
| SOUTH END. Part of stable at 650 Albany street. (See Sanitary Service.) | | | | |
| BACK BAY. Land at 62 Piedmont street, rented by city from Laurence Minot at \$10 per month; booth loaned by Election Commissioners used as an office on above land. | 3 00 | | | |
| Brick building, 47 Winchester street, leased for \$600 per year from Eleanor W. Daggett..... | 2 62½ | | | |
| WEST END. Part of stable on North Grove street. (See Sanitary Service.) | | | | |
| DORCHESTER. Gibson street, land and buildings used jointly with Water Service..... | | 7,000 00 | 5,000 00 | 12,000 00 |

Real Property in Charge of the Highway Division.—(Sewer Service.)

| LOCATION. | Estimated Value of Land. | Estimated Value of Buildings. | Total Value. |
|--|--------------------------|-------------------------------|--------------|
| SOUTH BOSTON. | | | |
| Summer street, underground pumping station. | | | |
| EAST BOSTON. | | | |
| East Eagle street, yard and buildings leased from Renton Whidden, part of rental paid by this service. (See Paving Service.) | | | |
| BRIGHTON. | | | |
| Yard, Western avenue. (See Water Service.) | | | |
| WEST ROXBURY. | | | |
| Child and South streets, yard and buildings occupied in common with Paving Service. (See Paving Service)..... | \$19,300 00 | \$3,500 00 | \$22,800 00 |
| DORCHESTER. | | | |
| Old Harbor Point, land and buildings, including pumping station, 22½ acres; 45,729 square feet, more or less, on the westerly side of Mt. Vernon street, exchanged with the Boston Consolidated Gas Company for 51,000 square feet, more or less, on the easterly side of Mt. Vernon street. | 138,000 00 | 675,000 00 | 813,000 00 |
| SOUTH END. | | | |
| Albany street, No. 678, yard and buildings, 42,000 square feet..... | 56,400 00 | 3,000 00 | 59,400 00 |
| Massachusetts avenue, near Albany street, land and buildings, 7,385 square feet..... | 5,200 00 | 500 00 | 5,700 00 |
| Union Park street, corner Albany street, pumping station, containing 4,167 square feet of land..... | 6,300 00 | 50,000 00 | 56,300 00 |
| HYDE PARK. | | | |
| Milton avenue, pumping station. | | | |
| BACK BAY FENS. | | | |
| Gatehouse..... | | 12,000 00 | 12,000 00 |
| MOON ISLAND AND SQUANTUM. | | | |
| Land, buildings and reservoirs. Upland in Squantum, 19.5 acres; upland on Moon Island, 37.65 acres; flats about Moon Island and Squantum, 131 acres. | | | |

Real Property in Charge of the Highway Division.—(Water Service.)

| LOCATION. | ESTIMATED VALUE OF LAND. | | Estimated Value of Buildings. | Total Value. |
|--|--------------------------------------|------------------------|-------------------------------|--------------|
| | Per Foot. | Total. | | |
| EAST BOSTON. | | | | |
| Eagle Hill reservoir, with a capacity of 5,600,000 gallons. Area of property, 220,875 square feet. | \$0 30 | \$66,300 00 | \$400 00 | \$66,700 00 |
| Condor street, formerly East Boston pumping station, now used as district headquarters and containing 40,000 square feet filled and 78,000 square feet flats. Includes strip of filled land and flats containing 42,000 square feet taken by Metropolitan Water Board, March 26, 1900. | 25,000 at \$0.60 93,000 at \$0.15 | 15,000 00 13,950 00 | 8,000 00 | 36,900 00 |
| High service tank, Orient Heights, capacity 122,000 gallons. Area of property, 11,394 square feet. | \$0 10 | 1,100 00 | 5,000 00 | 6,100 00 |
| CHARLESTOWN. | | | | |
| Medford street, corner Tufts street, containing 13,050 square feet. Upon this lot are a work-shop and stable. | 50 | 6,500 00 | 4,000 00 | 10,500 00 |
| BRIGHTON. | | | | |
| Western avenue, lot of land containing 135,350 square feet..... | ..... | 9,200 00 | 5,500 00 | 14,700 00 |
| WEST ROXBURY. | | | | |
| Williams street, Jamaica Plain, Nos. 110-112, land and buildings used as district headquarters, rented from Thomas Minton for \$600 per year. | | | | |
| Washington street and Metropolitan avenue, lot of land. Area of property, 12,895 square feet. | 14 | 1,800 00 | 8,000 00 | 9,800 00 |
| DORCHESTER. | | | | |
| Gibson street, land and buildings. (See Street Cleaning Service.) | | | | |

PUBLIC WORKS DEPARTMENT.

79

| | | | | |
|--|-------|-----------|------------|------------|
| ROXBURY. | | | | |
| Heath and Lawn streets, strip of land containing 5,707 square feet..... | 25 | 1,425 00 | ..... | 1,425 00 |
| SOUTH END. | | | | |
| Albany street, No. 710, containing 98,100 square feet. Upon this lot are a machine shop, stable, wharf and pipe yard..... | ..... | 91,000 00 | 117,000 00 | 208,000 00 |
| HYDE PARK. | | | | |
| Fairmount reservoir, with a capacity of 1,500,000 gallons *..... | 04 | 8,200 00 | 15,000 00 | 23,200 00 |
| Fairmount standpipe, with a capacity of 300,000 gallons. Area of property, 6.35 acres..... | | | | |
| Water street, pumping station and lot of land. Area of property, 934,951 square feet..... | 05 | 46,700 00 | 5,000 00 | 51,700 00 |
| Winthrop street, No. 48. Upon this lot are a building, two sheds and a stable. Leased from Henry S. Buntin, trustees for Robert Bleakie, for \$100 per year..... | ..... | ..... | ..... | ..... |
| Sprague street, bordering Sprague pond, lot of land containing 16,128 square feet..... | ..... | 500 00 | ..... | 500 00 |
| BROOKLINE. | | | | |
| Pipe route, from Beacon street to Boylston street. Area of property, 163,000 square feet..... | 15 | 2,500 00 | ..... | 2,500 00 |
| WINTHROP. | | | | |
| Strip of land at Point Shirley containing 7,725 square feet..... | 01 | 77 25 | ..... | 77 25 |
| DORHAM. | | | | |
| Paradise lane, containing 12.5 acres. Upon this lot is a pumping station..... | ..... | 7,000 00 | 2,000 00 | 9,000 00 |

* 206,020 square feet in Boston, balance in Milton.

EMPLOYEES.

The following tables show the number of requisitions made on the Civil Service Commission for men; the number appointed, reinstated, died, resigned, discharged and retired; also the grade and number of employees in the department:

| | |
|---|------|
| Requisitions made on the Civil Service Commission | 60 |
| Requisitions canceled | 16 |
| Number of men called | 145 |
| Number of men certified | 235 |
| Number of men appointed | 153 |
| Provisional appointments made permanent | 37 |
| Promotions allowed | 29 |
| Reinstatements allowed | * 29 |
| Number of men resigned | 16 |
| Number of men discharged | 15 |
| Number of men died | 92 |
| Number of Civil War veterans retired | 5 |
| Number of laborers retired | 74 |
| Number of transfers to other departments | 7 |
| Number of transfers from other departments | 31 |
| Number of Civil War veterans retired, died | 8 |
| Number of laborers retired, died | 44 |

The records of the department show that there are now 3,138 persons eligible for employment in the several divisions and of that number 3,032 were upon the January, 1917, pay rolls.

* Eighteen of these men were on the eligible list February 1, 1916.

Grade and Number of Employees.

| TITLE. | SERVICES. | | | | | | | | |
|----------------------------------|--------------------|---------|--------|-----------|---------------------|--------|---------|-----------|--------|
| | Central Office. | Paving. | Sewer. | Sanitary. | Street Cleaning. | Ferry. | Bridge. | Lighting. | Water. |
| Commissioner..... | 1 | | | | | | | | |
| Division engineers..... | | 1 | | | | | 1 | | |
| Engineers in charge..... | | | 1 | | | | | | 2 |
| Chief clerk..... | 1 | | | | | | | | |
| Clerks..... | 42 | 18 | 7 | 2 | | 1 | 1 | 1 | 38 |
| Messengers..... | | 1 | | | 1 | | | | 2 |
| Chief engineers (civil)..... | | 1 | 1 | | | | | | |
| Assistant engineers (civil)..... | | 14 | 21 | | | | 8 | | 6 |
| Draughtsmen..... | | 2 | 24 | | | | 11 | | 4 |
| Instrumentmen..... | | 6 | 24 | | | | 7 | | 5 |
| Rodmen..... | | 15 | 45 | | | | 9 | | 9 |
| Axeman..... | | 1 | | | | | | | |
| Inspectors..... | | 37 | 45 | 42 | 33 | | 17 | | 40 |
| Foremen..... | | 11 | 4 | 8 | 10 | | | | 13 |
| Subforemen..... | | 31 | 7 | | 5 | | 2 | | 1 |
| Investigator..... | | | 1 | | | | | | |
| Addressograph printer..... | | | | | | | | 1 | |
| Blacksmiths and assistants..... | | 10 | 2 | 18 | | | | | 3 |
| Boilermaker..... | | | | | | 1 | | | |
| Bracers and assistants..... | | | 10 | | | | | | |
| Blueprinters..... | | | 2 | | | | 1 | | |
| Boys..... | 3 | 3 | | | | | 1 | | |
| Chauffeurs..... | 1 | 3 | 5 | 3 | 3 | | 3 | 1 | 9 |
| Carpenters and assistants..... | | 22 | 4 | 3 | | 4 | 13 | | 9 |
| Chief inspectors..... | | 1 | | | 1 | | | | 2 |
| Chemist and assistant..... | | 2 | | | | | | | |
| Claim agent..... | 1 | | | | | | | | |
| Cement tester..... | | | 1 | | | | | | |
| Coal passers..... | | | 8 | | | | | | |
| Cashiers..... | | 1 | | | | 1 | | | |
| Constable and inspector..... | | 1 | | | | | | | |
| Drawtenders and assistants..... | | | | | | | 135 | | |
| Deckhands..... | | | | | | 27 | | | |
| Driver..... | | 1 | | | | | | | |
| Carried forward..... | 49 | 182 | 212 | 76 | 53 | 34 | 209 | 2 | 144 |

Grade and Number of Employees.—*Continued.*

| TITLE. | SERVICES. | | | | | | | | | |
|-----------------------------------|--------------------|---------|--------|-----------|---------------------|--------|---------|-----------|--------|--------|
| | Central Office. | Paving. | Sewer. | Sanitary. | Street Cleaning. | Ferry. | Bridge. | Lighting. | Water. | Total. |
| <i>Brought forward</i> | 49 | 182 | 212 | 76 | 53 | 34 | 209 | 2 | 144 | 961 |
| Dumpers..... | | | | | 3 | | | | | 3 |
| Engineers (steam)..... | | 11 | 7 | | | 12 | | | 1 | 31 |
| Electricians..... | | | 1 | | | 1 | 1 | | 1 | 4 |
| Firemen..... | | 1 | 8 | | | 41 | | | 2 | 52 |
| Chief engineer (steam)..... | | | 1 | | | | | | | 1 |
| Gatemen..... | | | 4 | | | 14 | | | | 18 |
| General foremen..... | | 1 | 1 | | 1 | 1 | | | 3 | 7 |
| Harnessmakers and assistants..... | | | | 9 | | | | | | 9 |
| Horseshoers..... | | | | 8 | | | | | | 8 |
| Inspectors, castings..... | | | | | | | | | 2 | 2 |
| Janitors (scrub)..... | | | | 1 | | 3 | 1 | | 2 | 7 |
| Janitresses..... | | | | | | 7 | | | | 7 |
| Joiners..... | | | | | | 3 | | | | 3 |
| Laborers and helpers..... | | 312 | 72 | | 265 | 10 | 2 | | 146 | 807 |
| Lamplighters..... | | | | | | 2 | | 1 | | 3 |
| Machinists and assistants..... | | | 4 | | | 1 | 1 | | 19 | 25 |
| Meter testers..... | | | | | | | | | 8 | 8 |
| Meter readers..... | | | | | | | | | 27 | 27 |
| Masons (stone and brick)..... | | | 11 | | | | | | | 11 |
| Medical inspectors..... | | 1 | | 1 | | | | | | 2 |
| Oilers..... | | | 17 | | | 12 | | | | 29 |
| Patternmakers..... | | | | | | 1 | | | 1 | 2 |
| Pavers and assistants..... | | 81 | | | | | | | | 81 |
| Plumbers and assistants..... | | | | 1 | | | | | 46 | 47 |
| Painters..... | | 1 | 1 | 11 | | 3 | 4 | | | 20 |
| Pipefitters..... | | | | | | 3 | | | | 3 |
| Captains..... | | | | | | 12 | | | | 12 |
| Property inspector..... | 1 | | | | | | | | | 1 |
| Quartermasters..... | | | | | | 12 | | | | 12 |
| Repairers..... | | | | | | | | | 59 | 59 |
| Roofer..... | | | | | | 1 | | | | 1 |
| Rammers..... | | 20 | | | | | | | | 20 |
| Rigger..... | | | | | | 1 | | | | 1 |
| <i>Carried forward</i> | 50 | 610 | 339 | 107 | 322 | 174 | 218 | 3 | 461 | 2,284 |

Grade and Number of Employees.—*Concluded.*

| TITLE. | SERVICES. | | | | | | | | | |
|----------------------------------|--------------------|------------|------------|------------|---------------------|------------|------------|-----------|------------|--------------|
| | Central Office. | Paving. | Sewer. | Sanitary. | Street Cleaning. | Ferry. | Bridge. | Lighting. | Water. | Total. |
| <i>Brought forward.....</i> | 50 | 610 | 339 | 107 | 322 | 174 | 218 | 8 | 461 | 2,284 |
| Sealers..... | | | | | | | | | 2 | 2 |
| Sewer flushers..... | | | 4 | | | | | | | 4 |
| Supervisors..... | 1 | | | | 1 | | 2 | | | 4 |
| Stenographers..... | 2 | 1 | 1 | | | | 1 | 1 | | 6 |
| Stonecutters..... | | 14 | 2 | | | | | | | 16 |
| Superintendent..... | | | | | | | | | 1 | 1 |
| Deputy..... | | | | | | | | | 1 | 1 |
| Stockkeepers..... | | | | 1 | | 1 | | | 3 | 5 |
| Stablemen..... | | 30 | 4 | 40 | 29 | | 5 | | 14 | 122 |
| Tallyman..... | | | | 1 | | | | | | 1 |
| Tankman..... | | | | | | 1 | | | | 1 |
| Teamsters..... | | 70 | 16 | 335 | 102 | | 2 | | 24 | 549 |
| Telephone operator..... | | | | | | | | | 1 | 1 |
| Tollmen..... | | | | | | 12 | | | | 12 |
| Toolman..... | | 1 | | | | | | | | 1 |
| Chief veterinarian..... | | 1 | | | | | | | | 1 |
| Watchmen..... | | 18 | 22 | 13 | 4 | | 4 | | 12 | 73 |
| Weighers and assistants..... | | 1 | | 3 | | | | | | 4 |
| Wharfinger and assistants..... | | 1 | | 4 | | | | | | 5 |
| Wharfmen..... | | | | 3 | | | | | | 3 |
| Wheelwrights and assistants..... | | | | 7 | | | | | | 7 |
| Yardmen..... | | 9 | 6 | 6 | 6 | | | | 8 | 35 |
| Totals..... | 53 | 756 | 394 | 520 | 464 | 188 | 232 | 4 | 527 | 3,138 |

Comparative Table Showing the Number of Employees Actually Employed February 1, 1916, and February 1, 1917.

| | Central Office. | Bridge. | Ferry. | Lighting. | Paving. | Sanitary. | Sewer. | Street Cleaning and Watering. | Water. | Total. |
|-----------------------|-----------------|---------|--------|-----------|---------|-----------|--------|-------------------------------|--------|--------|
| February 1, 1916..... | 53 | 200 | 188 | 4 | 743 | 543 | 379 | 452 | 498 | 3,060 |
| February 1, 1917..... | 51 | 227 | 188 | 4 | 740 | 493 | 381 | 438 | 510 | 3,032 |

Total Eligible Force.

| | | | | | | | | | | |
|-----------------------|----|-----|-----|---|-----|-----|-----|-----|-----|-------|
| February 1, 1916..... | 53 | 202 | 189 | 4 | 765 | 561 | 391 | 477 | 510 | 3,152 |
| February 1, 1917..... | 53 | 232 | 188 | 4 | 756 | 520 | 394 | 464 | 527 | 3,136 |

Table of Employees Showing Appointments, Transfers, Resignations, Retirements, Deaths, etc During the Year.

| Died. | Retired Laborers. | Retired Veterans. | Transferred to Other Departments. | Transferred to Other Services. | Resigned. | Discharged | February 1, 1916. | SERVICES, 1916-17. | January 31, 1917. | Transferred from Other Services. | Transferred from Other Departments. | Reinstated. | Unemployed |
|-------|-------------------|-------------------|-----------------------------------|--------------------------------|-----------|------------|-------------------|----------------------|-------------------|----------------------------------|-------------------------------------|-------------|------------|
| 2 | ..... | ..... | ..... | 3 | ..... | ..... | 53 | Central Office..... | * 53 | 3 | ..... | ..... |  |
| 4 | ..... | 1 | ..... | 16 | 3 | ..... | 202 | Bridge..... | 232 | 33 | 1 | ..... | : |
| 2 | 6 | ..... | ..... | 17 | 1 | 5 | 189 | Ferry..... | 188 | 11 | 7 | ..... |  |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 4 | Lighting..... | 4 | ..... | ..... | ..... | .. |
| 20 | 16 | ..... | ..... | 36 | 4 | 2 | 765 | Paving..... | 756 | 45 | 2 | 4 | |
| 16 | 11 | 2 | 3 | 40 | 1 | 3 | 561 | Sanitary..... | 520 | 16 | 1 | 1 | |
| 17 | 5 | 1 | 3 | 41 | 7 | 5 | 477 | Street Cleaning..... | 464 | 18 | 4 | ..... |  |
| 20 | 4 | ..... | ..... | 31 | ..... | ..... | 391 | Sewer..... | 394 | 21 | 4 | 3 | |
| 11 | 32 | 1 | 1 | 15 | ..... | ..... | 510 | Water..... | 527 | 52 | 12 | 3 | |
| 92 | 74 | 5 | 7 | 109 | 16 | 15 | 3,152 | Totals..... | 3,138 | 199 | 31 | 11 | 1 |

* Includes eight Central Office employees who are paid on Water Service pay roll.

Respectfully submitted,

E. F. MURPHY,

Commissioner of Public Works.



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PART II.

APPENDICES.

APPENDIX A.

CENTRAL OFFICE.

| | |
|---|-----------------|
| Appropriation | \$74,725 00 |
| Expenditures from February 1, 1916, to January 31, 1917 | 74,206 04 |
| Balance transferred to city treasury | <u>\$518 96</u> |

Expenditures.

| | |
|--|--------------------|
| Salary, commissioner | \$9,000 00 |
| Salaries of clerks, stenographers, supervisor of contracts, etc. | 58,459 73 |
| Automobile expense: | |
| Wages of chauffeur | \$1,092 00 |
| Tubes and tires, new and repairs, | 393 35 |
| Gasolene | 301 72 |
| Storage and care | 180 00 |
| Repairs | 137 33 |
| Shock absorbers | 80 00 |
| Supplies | 70 48 |
| Battery | 24 00 |
| Oil, grease, etc. | 17 45 |
| Registration | 15 00 |
| Robes | 10 60 |
| | <u>2,321 93</u> |
| Books, papers, etc. | 240 14 |
| Printing | 2,843 29 |
| Stationery | 721 61 |
| Atlases | 73 00 |
| Postage | 271 93 |
| Telephone tolls | 40 46 |
| Premium on surety bonds | 6 00 |
| Travel expense | 227 95 |
| | <u>\$74,206 04</u> |

APPENDIX B.

REPORT OF THE DIVISION ENGINEER OF THE
BRIDGE AND FERRY DIVISION.

BOSTON, February 1, 1917.

MR. EDWARD F. MURPHY,
Commissioner of Public Works:

DEAR SIR,—I respectfully submit the following report of the income, expenditures and operation of the Bridge and Ferry Division for the year ending January 31, 1917. The expenditures of the division in the regular maintenance appropriations of the department were \$600,710.22 as against an appropriation of \$610,363.74, leaving a surplus for the year of \$9,653.52.

In addition to the regular maintenance work, the division supervised the expenditure of \$73,654.43 under a number of special appropriations, mainly for work on bridges, making the total expenditures for the year under appropriations credited to the Bridge and Ferry Division \$674,364.65. This figure does not include the expenditures on work of other departments or divisions supervised by the engineering staff of this division.

BRIDGE SERVICE.

In addition to minor repairs, considerable construction work and painting has been done on maintenance of bridges, as well as some new construction. Detailed descriptions of the more important construction jobs are given in the accompanying statement. (See pages 101 to 114.)

Apportionment of Cost of Bridges Between Boston and Chelsea.—The special commission appointed under the acts of the Legislature to apportion the cost of these bridges made a report to the Supreme Court, which issued a decree confirming the report, but the city of Chelsea has appealed the case to the Supreme Court

of the United States, so that the final settlement of the case will not be made for some time.

Brookline Avenue Bridge (over the Boston & Albany Railroad).—The Public Service Commission, upon the joint petition of the City of Boston and the West End Street Railway Company for an alteration of the bridge, certified on July 11, 1916, that an alteration was necessary. In December all the parties at interest agreed that the City of Boston should build the bridge and thereupon plans were started. The bridge will be built in 1917. The cost of the bridge will be apportioned among several parties interested.

Franklin Street Subway (under the Boston & Albany Railroad).

Harrison Avenue Bridge (over the Boston & Albany Railroad).

The railroad company has petitioned for an apportionment of the cost of both these bridges before special commissions appointed by the Superior Court, and the decisions of the commissions will probably be made in 1917.

Malden Bridge.—The engineering force of the division has checked and approved shop prints of the superstructure of the draw span and steel work, which has been largely fabricated, and has inspected the work on the foundations and on the pile bridge. All construction work on this bridge will be paid for by the Boston Elevated Railway Company. This work is being done in accordance with chapter 777, Acts of 1913.

Winthrop Bridge.—The final settlement of the cost of Winthrop Bridge has not yet been made on account of an outstanding claim not yet settled.

FERRY SERVICE.

A new jet condenser and pump were installed on the "Noddle Island" after the complete breakdown of the old pump.

A large amount of repair work on the hulls of the boats was done and the port holes were blocked up by the orders of the Steamboat Inspectors. A more detailed statement is given on page 128 of construction work.

MISCELLANEOUS.

The Strandway Improvement was placed under the supervision of this division and a contract made on

December 8, 1916, with the New York State Dredging Company for the work. Considerable work has been done but adverse weather conditions have caused some delay.

RECOMMENDATIONS FOR 1917.

Bridge Service.

Beech Street Bridge.— The bridge over the New York, New Haven & Hartford Railroad at Beech street, West Roxbury, should be rebuilt in connection with the proposed improvement of Belgrade avenue, but the matter should come before the Public Service Commission, as both the Boston Elevated Railway Company and the New York, New Haven & Hartford Railroad Company should contribute toward the cost.

Broadway Bridge (over the Boston & Albany Railroad).— The floor of this bridge should be entirely rebuilt and a petition to the Public Service Commission for a decree ordering the alteration will be made jointly by the City of Boston and the Boston Elevated Railway Company.

Chelsea Bridge South.— Designs for Chelsea Bridge South should be made during the coming year. Borings have been made showing the character of the bottom, and some preliminary studies have been started which show that the bascule type of bridge would be the best for this location.

Warren Bridge.— A careful inspection made during the past year of the under-planking and stringers of Warren Bridge, over the Charles river, shows that the entire roadway of the bridge should be rebuilt. Some portions were found in dangerous condition and were patched temporarily. This woodwork has been in place over thirty years. The estimated cost of replacement is approximately \$100,000.

Committee on Safeguarding of Highway Drawbridges.— The recommendations made by the committee appointed by the Mayor to consider methods of safeguarding highway drawbridges should be carried out to completion during the coming year.

Navigation Signal Lights.— The installation of navigation signal lights on bridges over navigable waters should be carried on until the requirements of the Department of Commerce have been complied with.

Ferry Service.

Plans should be made for a new boat, as has been recommended for some years past, to replace the

"D. D. Kelly," which was built in 1879, and is therefore thirty-eight years old.

A new boiler should be installed on the "Hugh O'Brien," as although the boat is thirty-four years old the hull is in good condition and the installation of a new boiler would postpone the building of a second new boat for some years. Unless some action is taken along these lines, the Ferry Service will soon find two or three of the boats condemned, and will be crippled to such an extent that efficient service will be out of the question.

Ventilating systems should be installed on all the boats on account of the blocking up of port holes and spaces between the deck beams, thereby making conditions in the engine rooms and fire rooms very bad. The engines on all of the boats should be lined up, if possible, as this work if once done would save considerable maintenance expenditure, although the first cost would be considerable.

A large amount of repair work should be done on the piers as they are now in very poor condition.

REPORT IN DETAIL.

A detailed report of the operation and expenditures of the Bridge and Ferry Division during the year is appended herewith.

Respectfully submitted,

JOHN E. CARTY,
Division Engineer.

BRIDGE SERVICE.

FINANCIAL STATEMENT.

Expenditures from Maintenance Appropriation.

Bridge Service:

| | | |
|--------------------------------|--------------|---------------------|
| Boston bridges | \$277,847 65 | |
| Boston and Cambridge | 18,945 39 | |
| | | <u>\$296,793 04</u> |

Total Expenditures.

| | |
|--|---------------------|
| From maintenance appropriation | \$296,793 04 |
| From special appropriations | 68,177 24 |
| Total | <u>\$364,970 28</u> |

EXPENDITURES ON BOSTON BRIDGES.

(1.) Administration:

| | | |
|--|------------|--------------------|
| Salaries: | | |
| Division engineer | \$3,504 88 | |
| Supervisors | 4,780 95 | |
| Engineers and draughtsmen | 21,987 28 | |
| Clerk and stenographer | 1,396 20 | |
| Office boy | 34 50 | |
| Medical inspector | 83 00 | |
| Pensions, veterans | \$4,568 87 | |
| Pensions, laborers | 360 00 | |
| | | 4,928 87 |
| Holiday time | | 790 91 |
| Vacation time | | 1,341 73 |
| Military roll | | 252 52 |
| Miscellaneous rolls: | | |
| Sub chauffeur | \$66 50 | |
| On other division | 25 54 | |
| | | <u>92 04</u> |
| | | \$39,192 88 |
| Printing, postage, stationery | | 785 57 |
| Advertising | | 67 90 |
| Telephones | | 159 74 |
| Travel | | 322 49 |
| Engineers' instruments, supplies, etc. | | 300 12 |
| Typewriter inspection | | 30 00 |
| Miscellaneous office expenses | | 144 27 |
| | | <u>\$41,002 97</u> |

(2.) Yard and Stockroom:

Yard:

| | |
|--|-------------------|
| Employees: Clerk, janitor and watchmen | \$3,110 84 |
| Light | 117 95 |
| Fuel | 189 48 |
| Carried forward | <u>\$3,418 27</u> |

PUBLIC WORKS DEPARTMENT.

93

| | | | | |
|--|------------|----------|------------|--------------------|
| <i>Brought forward</i> | | | \$3,418 27 | |
| Repairing buildings: | | | | |
| Labor of mechanics | \$243 88 | | | |
| Material | 15 50 | | | |
| | | \$259 38 | | |
| Miscellaneous repair | | | | |
| bills | | 99 47 | | |
| | | | 358 85 | |
| Furnishings and supplies | | | 13 43 | |
| | | | | \$3,790 55 |
| Stockroom: Stock (material and supplies | | | | |
| for bridges) | | | 741 95 | |
| | | | | \$4,532 50 |
| Stable: | | | | |
| Employees: Stablemen and teamsters | \$4,834 50 | | | |
| Feed and straw | 1,171 09 | | | |
| Shoeing and clipping | 329 60 | | | |
| Veterinary | 33 05 | | | |
| Harness and repairs | 43 04 | | | |
| Wagon repairs | 318 92 | | | |
| Miscellaneous stable supplies | 34 77 | | | |
| | | | 6,764 97 | |
| | | | | <u>\$11,297 47</u> |
| (3.) Automobiles: | | | | |
| Division engineer: | | | | |
| Wages of chauffeur | | | \$777 00 | |
| Storage | \$180 00 | | | |
| Gasolene | 218 33 | | | |
| Repairs | 156 25 | | | |
| Registration fees | 25 00 | | | |
| Supplies and equipment, | 67 01 | | | |
| Tires | \$301 66 | | | |
| Tubes | 35 25 | | | |
| | | 336 91 | | |
| | | | 983 50 | |
| | | | | \$1,760 50 |
| Supervisor of Bridges: | | | | |
| Wages of chauffeur | | | \$493 75 | |
| Storage | \$142 50 | | | |
| Gasolene | 141 59 | | | |
| Repairs | 55 46 | | | |
| Supplies and equipment, | 71 00 | | | |
| Tires | \$86 03 | | | |
| Tubes | 13 72 | | | |
| | | 99 75 | | |
| | | | 510 30 | |
| | | | | 1,004 05 |
| Truck: | | | | |
| Wages of chauffeur | | | \$936 00 | |
| Gasolene | \$176 08 | | | |
| Repairs | 455 00 | | | |
| Registration fee | 8 00 | | | |
| Supplies and equipment, | 21 08 | | | |
| Tires | \$236 76 | | | |
| Tubes | 23 18 | | | |
| | | 259 94 | | |
| | | | 920 10 | |
| | | | | 1,856 10 |
| Engineer in charge, Strandway Improvement Repairs, | | | | 279 09 |
| | | | | <u>\$4,899 74</u> |

(4.) BRIDGES.

Expenditures on Tide Water Bridges.

| BRIDGES. | Draw- tenders' Salaries. | REPAIRS. | | | Supplies and Miscella- neous Expenses. | Total. |
|------------------------|--------------------------------|----------------------|-------------|------------------|--|--------------|
| | | Mechanics' Wages. | Material. | Repair Bills. | | |
| Broadway..... | \$9,486 37 | \$449 94 | \$290 37 | \$5,393 43 | \$295 18 | \$15,915 29 |
| Charlestown..... | 12,827 43 | 786 28 | 1,078 01 | 2,733 28 | 918 87 | 18,343 87 |
| Chelsea North..... | 10,850 75 | 612 10 | 57 05 | 613 08 | 542 93 | 12,675 91 |
| Chelsea South..... | 9,546 62 | 2,414 91 | 739 41 | 4,389 47 | 209 79 | 17,300 20 |
| Chelsea Street..... | 7,547 80 | 472 41 | 416 00 | 9 25 | 185 94 | 8,631 40 |
| Congress Street..... | 9,479 85 | 1,332 04 | 1,156 41 | 573 64 | 784 10 | 13,326 04 |
| Dorchester Avenue..... | 9,448 03 | 859 37 | 335 40 | 999 51 | 227 83 | 11,870 14 |
| Dover Street..... | 9,538 22 | 595 94 | 439 99 | 597 21 | 141 06 | 11,312 42 |
| Granite Avenue..... | 2,070 36 | 113 13 | 7 16 | 55 64 | 66 07 | 2,312 36 |
| L Street..... | 9,688 25 | 1,086 85 | 380 53 | 111 95 | 166 73 | 11,334 31 |
| Malden..... | 9,508 59 | 333 87 | 121 42 | 90 85 | 177 38 | 10,232 11 |
| Meridian Street..... | 9,882 38 | 775 40 | 275 36 | 217 31 | 266 46 | 11,416 91 |
| Neponset..... | 2,498 25 | 404 00 | 163 12 | 76 79 | 10 41 | 3,152 57 |
| Northern Avenue..... | 10,958 76 | 1,900 40 | 2,577 77 | 3,182 16 | 4,062 99 | 22,682 08 |
| Summer Street..... | 9,496 33 | 806 32 | 969 99 | 338 21 | 278 49 | 11,889 34 |
| Warren..... | 9,451 88 | 983 90 | 1,263 07 | 1,817 64 | 858 71 | 14,375 20 |
| Western Avenue..... | 398 84 | ..... | ..... | 113 61 | ..... | 512 45 |
| Totals..... | \$142,578 71 | \$13,926 86 | \$10,271 06 | \$21,313 03 | \$9,192 94 | \$197,282 60 |

Repairs on Inland Bridges.

| BRIDGE. | Labor and Material. |
|--------------------------------------|---------------------------|
| Athens street..... | \$371 10 |
| Austin street..... | 60 93 |
| Albany street (Boston & Albany)..... | 228 65 |
| Allston..... | 659 86 |
| Ashmont..... | 238 57 |
| Bennington street..... | 809 09 |
| Berkeley street..... | 165 28 |
| B ue Hill avenue..... | 306 18 |
| oston street..... | 246 38 |
| Carried forward..... | \$3,086 04 |

Repairs on Inland Bridges.—Continued.

| BRIDGE. | Labor and Material. |
|--|---------------------------|
| <i>Brought forward</i> | \$3,086 04 |
| Brooks street..... | 69 35 |
| Baker street..... | 33 11 |
| Beacon street (Fens)..... | 4 20 |
| Beacon street (Boston & Albany)..... | 1,608 24 |
| Boylston street (Boston & Albany)..... | 620 89 |
| Broadway (Boston & Albany)..... | 478 77 |
| Berwick park..... | 32 00 |
| Bolton street..... | 53 56 |
| Brookline avenue..... | 119 08 |
| Canterbury (at Ashland street)..... | 53 37 |
| Columbus avenue..... | 232 34 |
| Commercial Point..... | 414 97 |
| Cambridge street (Boston & Maine)..... | 83 16 |
| Central avenue..... | 282 96 |
| Chelsea Bridge (Boston & Maine)..... | 1,447 85 |
| Dartmouth street..... | 521 15 |
| Dorchester avenue (railroad)..... | 247 08 |
| Dana avenue (Hyde Park)..... | 211 09 |
| Everett street..... | 679 63 |
| Florence street..... | 979 88 |
| Ferdinand street..... | 1,231 35 |
| Freeport street..... | 11 74 |
| Glenwood avenue (Hyde Park)..... | 100 40 |
| Gainsborough street..... | 158 75 |
| Gold street..... | 12 00 |
| Hyde Park avenue (over Mother Brook)..... | 235 87 |
| Hyde Park avenue (over Stony Brook)..... | 92 51 |
| Hyde Park avenue (over "Y" railroad)..... | 44 00 |
| Harvard street..... | 184 32 |
| Huntington avenue..... | 2,535 00 |
| Irvington street..... | 52 50 |
| Leyden street..... | 1 20 |
| Milton street (Hyde Park)..... | 73 85 |
| Massachusetts avenue (over Providence Division)..... | 189 42 |
| Massachusetts avenue (over Boston & Albany)..... | 20 31 |
| <i>Carried forward</i> | \$16,151 94 |

Repairs on Inland Bridges.—Concluded.

| BRIDGE. | Labor and Material. |
|---|---------------------------|
| <i>Brought forward</i> | \$16,151 94 |
| New Allen street (Hyde Park)..... | 16 75 |
| Oakland street..... | 122 64 |
| Perkins street..... | 198 58 |
| Reservoir road..... | 95 56 |
| Redfield street..... | 211 65 |
| River street (Hyde Park)..... | 10 00 |
| Summer street (over A street)..... | 75 77 |
| Summer street (over B street)..... | 677 28 |
| Summer street (over C street)..... | 23 20 |
| Shawmut avenue..... | 120 32 |
| Silver street..... | 291 56 |
| Southampton street (over railroad)..... | 249 57 |
| Southampton street (alcove way)..... | 14 24 |
| Sprague street..... | 142 59 |
| Spring street..... | 25 75 |
| Tollgate way..... | 334 52 |
| West Fourth street..... | 925 92 |
| West Newton street..... | 202 70 |
| West Rutland square..... | 13 50 |
| Webster street..... | 25 32 |
| Miscellaneous: | |
| Removing snow and cleaning inland bridges, labor..... | 2,916 44 |
| Total..... | \$22,845 80 |

SUMMARY OF EXPENDITURES.

| | |
|--|---------------------|
| (1) Administration | \$41,002 47 |
| (2) Yard, stockroom and stable | 11,297 47 |
| (3) Automobiles | 5,019 74 |
| (4) Bridges | 220,128 31 |
| (5) Public landing | 399 66 |
| | <u>\$277,847 65</u> |

For expenditures on Boston and Cambridge bridges, see pages at end of report.

EXPENDITURES FROM SPECIAL APPROPRIATIONS.

ALBANY STREET BRIDGE (FREIGHT TRACKS).

| | |
|----------------------------|----------------|
| Wages of flagmen | <u>\$46 99</u> |
|----------------------------|----------------|

BROADWAY BRIDGE (OVER BOSTON & ALBANY RAILROAD).

| | |
|-----------------------|----------------|
| Engineering | <u>\$85 84</u> |
|-----------------------|----------------|

BROADWAY BRIDGE, REBUILDING.

| | | |
|--|----------|-----------------|
| Engineering | \$61 11 | |
| Electric light cable | 72 25 | |
| Lumber for motor house | 38 45 | |
| Miscellaneous, advertising, etc. | 34 13 | |
| Paid Barnes-Pope Company on contract for navigation lights | \$355 00 | |
| Paid R. & S. Machine Company on contract for ladders for navigation lights | 423 00 | |
| | <hr/> | 778 00 |
| | | <u>\$983 94</u> |

CAMBRIDGE BRIDGE, PAINTING AND REPAIRING.

| | | |
|--|------------|-----------------|
| Paint | \$105 30 | |
| Labor, painting | 25 00 | |
| Analysis of paint | 40 00 | |
| Salary of inspector | 90 00 | |
| Fares, telephones, etc., of inspector | 5 45 | |
| Paid Connors Brothers on contract for painting | \$6,220 00 | |
| Less amount paid in 1915 | 5,006 50 | |
| | <hr/> | \$1,213 50 |
| Less amount withheld | 150 80 | |
| | <hr/> | \$1,062 70 |
| Less amount paid by City of Cambridge (one half) | 531 35 | |
| | <hr/> | \$531 35 |
| Less amount of claim filed for bill due | 60 00 | |
| | <hr/> | 471 35 |
| | | <u>\$737 10</u> |

CHELSEA BRIDGE SOUTH.

| | | |
|---|----------|-------------------|
| Engineering | \$415 95 | |
| Borings | 611 78 | |
| Miscellaneous (fares, etc., of engineers) | 7 45 | |
| | <hr/> | <u>\$1,035 18</u> |

DOVER STREET BRIDGE.

| | | |
|---|------------|-------------------|
| Engineering | \$44 44 | |
| Advertising | 8 20 | |
| Gears | 178 57 | |
| Electrical machinery | 339 60 | |
| Paid George T. Rendle Company on contract for building fenders, | \$2,853 03 | |
| Less amount paid in 1915 | 2,390 23 | |
| | <hr/> | 462 80 |
| Paid R. & S. Machinery Company on contract for draw machinery | \$1,385 97 | |
| Less amount paid from maintenance appropriation | 340 45 | |
| | <hr/> | 1,045 52 |
| | | <u>\$2,079 13</u> |

MALDEN BRIDGE.

| | | |
|---|-------------|--|
| Paid Hugh Nawn Contracting Company on contract for reconstruction of bridge | \$57,558 43 | |
|---|-------------|--|

SPRING STREET BRIDGE.

| | | |
|---|----------------------|-------------------|
| Engineering | \$831 49 | |
| Inspection | 130 00 | |
| | | \$961 49 |
| Iron fence | | 39 70 |
| Paid New England Cement Gun Company cement work | | 1,003 94 |
| Paid Clark & Gore on contract for building bridge | \$13,357 32 | |
| Less amount paid in 1915 (unfinished) | 10,508 55 | |
| | | 2,848 77 |
| Paid George T. Rendle Company on contract for building approach, Less amount paid in 1915 | \$1,116 13 682 08 | |
| | | 434 05 |
| | | <u>\$5,287 95</u> |

SUMMER STREET BRIDGE (OVER NEW YORK, NEW HAVEN & HARTFORD RAILROAD).

| | | |
|--|------------|-----------------|
| Paid W. A. Murtfeldt Company on contract for repairing sidewalks | \$2,417 85 | |
| Less amount paid in 1915 | 2,055 17 | |
| | | <u>\$362 68</u> |

STRANDWAY AND OLD HARBOR IMPROVEMENT.*

| | | |
|---|------------|-------------------|
| Engineering | \$3,196 66 | |
| Inspection | 337 50 | |
| | | \$3,534 16 |
| Wages of carpenters on Sewer Division rolls | 97 50 | |
| | | \$3,631 66 |
| Advertising, printing and postage | | 330 36 |
| Telephones | | 20 33 |
| Miscellaneous office expenses: furnishings, office supplies, etc. | | 107 90 |
| Photos and blueprinting | | 166 11 |
| Fuel | | 20 25 |
| Borings | | 797 81 |
| Moving building | | 50 00 |
| | | <u>\$5,124 42</u> |

* This work is being done under the supervision of the division engineer of the Bridge and Ferry Division.
The cost of sewerage works on this improvement is known under the head of "Sewer Service."

PUBLIC WORKS DEPARTMENT.

99

SUMMARY.
Expended from Special Appropriations in Charge of Bridge Service.

| | Balances from 1915. | Total Credits for 1916. | Expended 1916. | Total Expended to January 31, 1917. | Balances Unexpended, January 31, 1917. |
|---|---------------------------|-------------------------------|-------------------|--|---|
| Albany Street Bridge (freight tracks)..... | \$421 52 | \$421 52 | \$46 99 | \$625 47 | \$374 53 |
| Broadway Bridge (over Boston & Albany Railroad)..... | 3,926 45 | 3,926 45 | 85 84 | 159 39 | 3,840 61 |
| Broadway Bridge, rebuilding..... | 29,072 39 | 8,029 74 | 983 94 | 128,122 93 | 7,045 80 |
| Cambridge Bridge, painting and repairing..... | 6,054 45 | 6,054 45 | 737 10 | 6,682 65 | 5,317 35 |
| Central Avenue Bridge..... | 735 65 | 735 65 | ..... | 164 35 | 735 65 |
| Chelsea Bridge South..... | 4,199 46 | 21,067 10 | 1,035 18 | 71,835 72 | 20,031 92 |
| Dover Street Bridge..... | 2,179 13 | 2,079 13 | 2,079 13 | 5,000 00 | |
| Malden Bridge..... | ..... | 57,558 43 | 57,558 43 | 57,558 43 | |
| Meridian Street Bridge..... | 15,152 62 | 15,152 62 | ..... | ..... | 15,152 62 |
| Spring Street Bridge..... | 5,427 37 | 6,927 37 | 5,287 95 | 17,860 58 | 1,639 42 |
| Summer Street Bridge (New York, New Haven & Hartford Railroad)..... | 1,862 36 | 1,862 36 | 362 68 | 2,495 32 | 1,499 68 |
| Winthrop Bridge..... | 4,466 56 | 4,466 56 | ..... | 50,533 44 | 4,466 56 |
| Strandway and Old Harbor improvement..... | ..... | 599,000 00 | 5,124 42 | 5,124 42 | 593,875 58 |
| | \$73,497 96 | \$727,281 38 | \$73,301 66 | \$346,162 70 | \$653,079 72 |

INCOME.

The total amount received by the City Collector on account of bridges was \$2,891.56. The items are as follows:

| | |
|---|-------------------|
| From town of Dedham as its portion of expense of rebuilding Spring Street Bridge | \$1,500 00 |
| From town of Milton as its portion of the expense of maintenance and repairs of Granite Avenue Bridge | 677 25 |
| From Boston & Albany Railroad for its portion of expense of repairs to Albany Street Bridge | 687 31 |
| Sale of old material | 17 00 |
| Damage to Bridge Service property | 10 00 |
| | <hr/> |
| | <u>\$2,891 56</u> |

BRIDGE SERVICE CONSTRUCTION WORK, 1916-1917.

Ainsworth Street Footway.

Under an order approved August 7, 1915, the Street Commissioners laid out a footway in extension of Ainsworth street, West Roxbury, between Belgrade avenue and Tyndale street, a portion of which was under the tracks of the New York, New Haven & Hartford Railroad, the width of the layout being 10 feet.

Plans were prepared for the work by this division, providing for carrying only the two tracks of the railroad now laid over the subway, and bids on these plans were received. Before the contract was made, however, the railroad company requested that the side walls of the tunnel be built of sufficient length to enable the tunnel to be extended to provide for two additional tracks, should it be found desirable at any future time to lay these tracks. All bids were accordingly rejected and the plans modified to comply with this request of the railroad company.

A contract was made with the Charles J. Jacobs Company, the lowest bidder, dated March 15, 1916, for doing the work in accordance with the new plans. Work was begun under this contract June 23, 1916, and completed November 18, 1916, the amount paid under the contract being \$6,027.34.

Arrangements were made with the New York, New Haven & Hartford Railroad Company for supporting its tracks by trestle work during the progress of the work. The bill for this work has not been rendered by the railroad company at the date of this report.

The length of the footway is 277 feet 8 inches; the approach from Belgrade avenue is 145 feet 6 inches long; that from Tyndale street, 90 feet 6 inches long, and the tunnel under the railroad is 41 feet 8 inches long. From Belgrade avenue the surface of the footway descends at a uniform gradient of about 6.6 feet per 100 feet to the tunnel. It is practically level through the tunnel, then ascends by three short flights of six steps each and then continues at a uniform ascending gradient at 8.9 feet per 100 feet to Tyndale street.

The structure under the railroad tracks is a reinforced concrete arch tunnel, 7 feet wide in the clear and 7 feet 11 inches high at the center. The side walls are reinforced with two lines of 1-inch square twisted steel rods spaced 9 inches on center in each line; the arch is reinforced with twenty-one 10-inch steel beams weighing 44 pounds per foot, 9 feet long, placed 2 feet on centers, crossway of tunnel, and 1 inch square, twisted steel rods, 8 inches on centers, running lengthwise. The floor also has 1-inch square, twisted rods 9 inches on center. The arch is 17½ inches thick at crown and is covered with four thicknesses of roofing felt, thoroughly mopped, this waterproofing being carried well down the surface to the springing lines. The side walls of the tunnel are 18 inches thick; the floor is 24 inches thick, with granolithic wearing surface. The treads of the steps also have a granolithic wearing surface.

The side walls and the floor of the open cut approaches to the tunnel are of the same thickness as in the tunnel and the reinforcement is similar, except that the two lines of rods are carried only a short distance outside the ends of the tunnel, a single line being used for the rest of the walls, except about 30 feet at the Belgrade street end, where the wall was not of sufficient height to require any reinforcement. For a length of about 50 feet at the Tyndale street end, and about 44 feet at the Belgrade avenue end, no side walls were built, the footway being widened to 10 feet, the full width of the taking, only a low curb 8 inches wide being built at the Tyndale street end to support the lawns of the adjoining estates.

The masonry of the entire structure is of Portland cement concrete, composed of one part cement, two parts sand and four parts broken stone. All concrete of the arch, side walls and floor was waterproofed by the admixture of the Keneally Waterproof Compound, applied under the direction of the National Waterproofing Company.

A substantial wrought-iron pipe rail fence was built across the end of the tunnel and for the entire length of the side walls of the approaches; oak handrails were also built at the stairs. A line of 10-inch vitrified sewer pipe was laid on the center line of the footway from a catch-basin at the head of the stairs near the Tyndale street end and connected with the sewer in Belgrade avenue. A second catch-basin was built at the foot of

the incline of the approach from Belgrade avenue and provision made for the surface water collected in the footway to reach the drain pipe at the catch-basins through drop inlets protected by iron gratings built in the floor. A manhole was also built in the sidewalk of Belgrade avenue on the center line of the drain pipe.

The tunnel is lighted by three 60 candle power electric lamps set in the underside of the arch.

Broadway Bridge (over Fort Point Channel).

A contract for cleaning and painting the fixed spans of this bridge, between Lehigh and Foundry streets, including spans over these streets, was made with Maurice M. Devine, dated September 30, 1916, and at the date of this report the work is practically completed except over the main tracks of the New York, New Haven & Hartford Railroad Company.

As the work over these tracks can only be done on Sundays and then only with many interruptions, the completion of the contract has been seriously delayed, but it is now expected that the work will be all done by April 1.

The steel work of the portion north of the draw span was cleaned by the wire brush process and that south of the draw by the sand blast process; all heavy rust scales, however, were removed by hammers and chisels before the application of either process. The coats of paint were applied in a most thorough manner, the paint being furnished by the contractor, prepared under formulas furnished by the city. The first coat was sublimed blue lead and linseed oil paint; the second a white lead-zinc and linseed oil paint. The amount paid under this contract to date has been \$4,914.70.

Navigation lights have been installed on the draw and piers of this bridge under a contract with the Barnes-Pope Electric Company, dated March 8, 1916, at a cost of \$355. Ladders and platforms for access to the lights have been built under a contract with the R. & S. Machine Company at a cost of \$423.

Charlestown Bridge (Boston to Charlestown).

The easterly or downstream sidewalk of the part of Charlestown Bridge, supported by plate girders, was rebuilt of artificial stone under a contract with the W. A. Murtfeldt Company, dated September 5, 1916. The

work was completed December 9, 1916, the total amount paid under the contract being \$1,701.68.

The old asphalt walk which was put down in 1899, at the time the bridge was built, had become badly worn; in some places the wearing surface had entirely disappeared, leaving the coarse material of the base for the surface. The old walk was entirely removed, the surface of buckle plates mopped with hot asphalt and the depressions filled with an asphalt mastic applied hot and brought to a smooth surface at the level of the crown of the buckle plates. On this base an artificial stone walk was laid, 3 inches in thickness, reinforced with an electrically welded fabric made by the Clinton Wire Cloth Company. As there was considerable vibration in the floor of this bridge it was felt that heavy reinforcement was necessary. The fabric used was made of No. 13 galvanized wire with 4-inch by 4-inch mesh, cut in sheets about 4 feet by 5 feet, and laid so that the blocks in the walk should have a margin of 1 inch outside the reinforcement. The fabric was placed at a uniform depth of 2 inches below the finished surface of the walk.

The work and material were in accordance with the standard specifications of this department for artificial stone walks. A bond was filed guaranteeing the maintenance of the work for a period of one year from its completion.

In the turning mechanism of the draw span of this bridge some new pinions have been substituted for worn ones which had been in service for seventeen years, and some overhauling and additions have been made to the end lifts.

Chelsea Bridge (over Boston & Maine Railroad).

Under a contract dated August 4, 1916, made with W. S. Rendle, the sidewalk surface of this bridge has been relaid with 2-inch yellow pine plank for the full length of the viaduct over the railroad tracks. Work was completed October 7, 1916, and the amount paid under the contract was \$1,408.12.

In advance of the work done by the city the Boston & Maine Railroad Company removed the old sidewalk planking and renewed such stringers and curb sticks as were found to be in poor condition. The railroad company also did a small amount of painting on the sidewalk brackets.

Chelsea North (from Charlestown to Chelsea).

On account of leakage through the deck of the draw span, sheet metal coverings have been placed over the motors and some of the machinery parts. This was done under an agreement with Peter Robertson for the sum of \$159.

Chelsea Bridge South (over South Channel, Mystic River).

The floor of the draw span of the temporary bridge at Chelsea Bridge South, which has been in continuous use at this location since March, 1914, and which had also been used as a temporary structure during the rebuilding of Chelsea Bridge North from August, 1912, to June, 1913, was found to be in such a condition that it was deemed necessary to renew the stringers and planking at once. A contract was made with M. S. Kelliher, dated November 10, 1916, for doing this work, and it was completed December 7, 1916. The amount paid under the contract was \$3,095.20.

Because of the heavy traffic over this bridge during the day the contractor was required to do all of his work on the draw between the hours of 8.30 p. m. and 6 a. m., during which hours all street car traffic was taken off the draw and only a single line of vehicle traffic was allowed on the draw; foot travel was maintained at all times on the sidewalk.

The Bay State Street Railway Company coöperated with the city in the removal of the floor, removing and replacing its rails as required to facilitate the work and furnishing the electric light used.

Both the upper and lower planking of roadway were entirely replaced with 2-inch and 4-inch spruce plank and all the stringers which were not in good condition were replaced with new yellow pine timber of the same dimensions as the old. The sidewalk was not disturbed, a new line of stringers being laid at the curb line to support the ends of the planking.

The ends of the draw fender pier and the channel face of that pier have also been repaired and are now in fairly good condition. At the downstream end some new piles were driven and capped, new wales and planking put on channel face and the corner irons renewed, which work was done by W. H. Ellis & Son Company at a cost of \$238.40. Repair work has been done on

the machinery of this draw by the Boston Bridge Works and the R. & S. Machine Company during the year, costing \$121 in all.

Congress Street Bridge (over Fort Point Channel).

In February of this year the center bearing of the draw was found to be in a dangerous condition and repairs were made in the shortest possible time. New discs and castings were substituted for the old ones and all put in a good working condition. Total cost, \$192.

Dover Street Bridge (over Fort Point Channel).

The old machinery on this draw having become obsolete and much worn it was decided to install a new and more modern equipment. Accordingly after advertising a contract was made with the R. & S. Machine Company for furnishing and installing new turning machinery, which was completed in July at a cost of \$1,225, the city furnishing the gears and electrical equipment, costing \$534, making a total cost of \$1,739.

Dorchester Avenue Bridge (over Fort Point Channel).

In December a coal barge ran into the draw, fracturing one of the main girders. This necessitated a new girder or extensive repairs to the old one. As the latter plan seemed to require the least time the Boston Bridge Works were set to work immediately and the repairs made at a cost of \$426.

Gove Street Footbridge, East Boston (over Boston & Albany Railroad).

As stated in the report for last year the concrete foundation piers for this bridge were completed December 6, 1915, at a cost of \$860, and a contract made with the Boston Bridge Works, Inc., for the steel superstructure.

The work of erecting the bridge was begun August 15, 1916, and was completed October 5, 1916. The amount paid under the contract was \$8,702.05.

The steel structure is the longest single span footbridge in the city, the entire width of the railroad property being crossed by a single span of 157 feet 1 $\frac{3}{4}$ inches between centers of end bearings and provides a clear headroom of 22 feet above the top of the rails.

The bridge consists of two steel riveted through trusses, 20 feet deep at the center and 11 feet 6 inches deep at ends, placed 9 feet apart on centers. The ends rest on steel towers about 22 feet 6 inches high, from which steel stairways descend to the street level.

The floor consists of 8-inch I-beams, 12 feet 5 inches on centers, on which rest four lines of 3-inch by 12-inch yellow pine stringers carrying the surface planking of 2-inch yellow pine. A railing of excelsior rust proof wire fencing, 4 feet 6 inches high with 2-inch by 6-inch mesh, is attached to each truss.

The stairs rest on steel trestles, consisting of 8-inch by 8-inch H-section columns braced together with riveted angle bracing. The treads of the steps are 2-inch yellow pine plank and a three-rail gas pipe fence protects the sides of the stairway.

Huntington Avenue Bridge (over Boston & Albany Railroad).

When the present bridge was built in 1909 the roadway was surfaced with brick block pavement. After seven years' wear, although it had been patched a number of times, the surface was in such a condition that it could not be maintained longer with safety.

A contract was accordingly made with the Central Construction Company, dated September 20, 1916, for repaving the entire roadway with wood blocks, except between the rails of the Boston Elevated Railway Company and for a width of 8 inches outside each rail. The old concrete surface was scraped and cleaned until free from all loose material and on this surface was laid three thicknesses of roofing felt thoroughly mopped with asphalt. A thin layer of mortar, equal parts cement and sand, was spread on the waterproofed surface and struck to a true surface exactly parallel to the top of the finished pavement. The wood blocks were 4 inches deep, 4 inches wide and not less than 8 inches long, and in all other respects in accordance with the standard specifications of this department — 1916 edition. They were also laid as required under these specifications, the joints being filled with asphalt filler. Expansion joint fillers were laid along each parapet. The granite block pavement was laid in accordance with the standard specifications of this department; joints filled with asphalt filler.

The work was completed December 11, 1916, the total amount paid under the contract being \$2,535.

During the progress of this work the Boston Elevated Railway Company brought its track to the proper grade and electrically welded the rails to the ties. The railroad company laid all the granite paving between its rails.

Morton Street Bridge (over the New York, New Haven & Hartford Railroad, Midland Division).

Although the street on both sides of the bridge over the railroad tracks had been built at a width of 80 feet, as laid out by the Street Commissioners, the width of the bridge maintained by the railroad company was only 30 feet and no provisions made for sidewalks.

With the consent of the railroad company two sidewalks, each 5 feet wide, have been built by the city entirely independent of the old bridge. The total cost of this work, including concrete additions to the masonry abutment, was \$375.

Northern Avenue Bridge (over Fort Point Channel).

The pointing in some of the joints of the circular masonry wall which surrounds the turntable of the draw span of this bridge and acts as a dam to keep out the tidewater had become so badly disintegrated as to allow considerable seepage through the masonry.

Only the joints just below high water were found to be in bad condition and from these the poor mortar was removed and they were repointed with rich Portland cement mortar, to which was added a liquid waterproof compound. The work was done by the National Waterproof Company at a cost of \$305.14.

Repairs have been made on the end lifts of the drawspan where parts were found to be badly worn. Pins have been trued up and bronze bushings placed in sixteen of the bearings. The work was done under a contract with the R. & S. Machine Company at a cost of \$1,396.

Spring Street Bridge (over Charles River).

The Mayor of the City of Boston, the chairman of the County Commissioners of Norfolk County and the chairman of the Board of Selectmen of the town of Dedham were constituted a commission by chapter 235 of the Acts of the Legislature of 1915, and authorized to

widen Spring Street Bridge. A contract was made with Clark & Gore for doing this work, dated July 28, 1915.

Work was begun September 29, 1915, but before the upstream half of the bridge was ready for travel, it was necessary, about the middle of January, to shut down all construction, and work was not resumed until the middle of May of last year. The upstream half of the roadway was opened to travel June 22, 1916, the downstream half on October 9, 1916, and the entire work was completed November 16, 1916.

The old bridge was a stone and masonry structure about 150 feet long and 25 feet wide, having five segmental arches, each of about 19 feet span. The foundations of the arches rested on a crib work or grillage of wood.

The new bridge is 57 feet wide from face to face of coping at the center of the arches and 55 feet wide from center to center of railings, providing two sidewalks of 8 feet each and a roadway 39 feet wide between curb lines. The widening was made by the extension of the arches, piers and abutments of the old bridge 22 feet on the south or upstream side and 10 feet on the north or downstream side. Borings taken before the plans were made indicated that it would not be necessary to drive piles for foundations except at the extensions of the abutment on the Dedham side. Piles were driven only under the northerly extension of the Dedham abutment, as it was found after driving some test piles that the material was so hard that piles would not penetrate sufficiently into this material to be of any value. The small amount of soft material over the hard gravel was therefore removed and the concrete placed directly on the gravel. Steel sheet piling was driven close to and along the ends of each pier on the north side and at both ends of each abutment to prevent the excavation from undermining the foundations of the old bridge. It was not driven at the ends of piers on the south side as the dredging was kept far enough back to avoid any danger of disturbing the material under the old foundation. Excavations for the foundation of the extensions were carried down to coarse gravel varying from 11.5 to 6 feet below the springing line of the arches. The excavation at the Dedham abutment was carried down to 9½ feet below the springing line and made level at that elevation, and where piles were

driven they were cut off 1 foot higher. The excavation at the Boston abutment was carried to $8\frac{1}{2}$ feet below the springing line on the front and sloped up 2 feet to the back line of the foundation.

A curbing or cofferdam of tongued or grooved 4-inch spruce was built at the foundation of the piers and abutments to form a reasonably water-tight dam in which concrete was deposited, and after the foundations were completed the sheeting was cut off at about extreme low water.

The concrete of the foundations, arches and spandrel walls was composed of one part Portland cement, two parts sand and four parts clean pebbles or broken stone. The contract provided for the exposed concrete surfaces being smoothed and trued after the forms had been removed and then treated with a thin cement mortar wash, thoroughly rubbed down with a piece of carborundum. The commission, however, decided to point the surfaces of the spandrel walls, leaving only the coping, pilasters and a ring 12 inches wide at each arch with smooth surface. The top surface of the coping, which was flush with the sidewalks, has a granolithic wearing surface. After the completion of the concrete masonry, and before any filling had been done, the tops of the arches and abutments and the inner surfaces of the spandrel walls were made smooth by a coating of mortar and then covered with four thicknesses of roofing felt, mopped in the most thorough manner with hot asphalt. To protect the waterproofing from any coarse material in the filling a layer of asphalt mastic, 1 inch thick, made of four parts dry sand and one part asphalt, was put on hot over the tops of the arches and abutments. Drain pipes, 6 inches in diameter, are built in the concrete extensions of each pier to conduct away any water that may seep through the filling.

The filling behind the spandrel walls and abutments was made of clean gravel in compact layers, thoroughly tamped or rolled.

The Bay State Street Railway Company relayed its track on the bridge and paved with granite blocks on a concrete base the area between its rails and 18 inches outside each rail.

The roadway surface is a broken stone surfacing, bound with Bermudez road asphalt 6 inches in thickness when completed. The lower course was No. 1 stone, $2\frac{1}{2}$ to $1\frac{1}{4}$ inches in diameter, 4 inches in thickness after rolling.

The upper course was No. 2 stone, $1\frac{1}{4}$ to $\frac{1}{2}$ inch in diameter, 2 inches in thickness after rolling. Upon the upper course Bermudez road asphalt was uniformly applied by a pressure machine at the rate of $1\frac{1}{4}$ gallons to each square yard of surface and covered with clean pea stone in sufficient quantity to fill the surface voids and then thoroughly rolled. A second application of asphalt at the rate of $\frac{1}{2}$ gallon per square yard was then applied and covered with a coating of pea stone and then the whole thoroughly rolled.

A bond was furnished guaranteeing the maintenance of the roadway for one year after its completion. The original contract called for a crushed stone sidewalk. The commissioners, however, decided to build a granolithic walk in place of crushed stone at an additional total cost of \$220. The walk was constructed in accordance with the standard specifications of the City of Boston for artificial stone sidewalks. The granite edge-stones, both as to material and workmanship, were in accordance with the standard specifications of the city. The fences of the old bridge were put in good condition and replaced on the coping of the new bridge. Near the curb lines at each sidewalk a 6-inch drain pipe was set in the concrete of each arch, which terminated in a rectangular reflector, 16 inches by 24 inches, in the crown of the arches in which it is planned to place electric lights to illuminate the water ways under the bridge.

The Edison Electric Illuminating Company has built a brick manhole with iron frame and cover at each lamp and laid a 2-inch duct in each walk connecting the manholes with its electric lighting service at the Boston end of the bridge.

Final payment has not yet been made under the Clark & Gore contract at the date of this report, but the final estimate, including all extras, will be \$16,220.

The masonry of the old arches was laid dry and the ring stone had many wide open joints; some of the smaller face stones had fallen out, leaving large voids. It was felt that if the joints and face voids could be filled with concrete or cement mortar the arches would be strengthened and the life of the bridge prolonged. Several methods for accomplishing this end were considered and finally arrangements were made with the New England Cement Gun Company for filling the joints and voids with "Gunite." The "Gunite" was composed of one part Portland cement and three parts sharp,

clean sand and was forced into the openings under a pressure of 30 pounds per square inch. The cost of this work was \$1,068.87, a small amount of which has not been paid at this date.

The act creating the commission did not place the construction of the approaches in their hands but left with each municipality the work of building the approach on its side of the river. The plans for both approaches, however, were made by this division; that for the Dedham side after consultation with its town engineer.

The contract for the Boston approach was made by the Commissioner of Public Works with the George T. Rendle Company, dated August 5, 1915, and that for the Dedham approach was made with the same company under date of July 28, 1915, by the selectmen of that town. The construction of the Dedham approach was entirely in charge of its town engineer. Although the work of building the Boston approach was completed October 16, 1916, at the date of this report final payment has not been made.

The work for the City of Boston covered by its contract was the building of a concrete return wall about 44 feet long on the new northerly side line of the street and a concrete wing wall about 22 feet long on the southerly side of the street to retain the filling of the widened street. The concrete was composed of one part Portland cement, two and one half parts sand and five parts broken stone; the quality of materials and workmanship being the same as that of the concrete in the bridge. The filling, edgestone and roadway surfacing were the same as described for corresponding work on the bridge. The sidewalks of the approach were of crushed stone. A pipe rail fence was built on the return walls. The posts on the north side were set in the concrete coping of the wall and those on the southerly side were set in concrete bases 12 inches square and 4 feet deep. The rails and pipes were made of 2-inch diameter wrought-iron extra heavy pipe. The contract price for the work was \$1,459; total amount paid is \$1,116.13.

Summer Street Bridge (over Point Fort Channel).

The machinery for running this draw has been overhauled and new gears and parts substituted where old ones were badly worn. The work was done by A. P. Carroll at a cost of \$289.

Warren Bridge (from Boston to Charlestown).

The downstream fender guard at the channelway of the draw has been rebuilt. New piles and spur shores were driven and all timber work renewed. The cost of this work was \$774.61.

Last November an examination was made of the roadway flooring of the fixed portions of this bridge. The floor planking and stringers were examined with special care as it was known that portions of the planking and the tops of many of the stringers were badly decayed. A large number of borings were made in the 6-inch yellow pine deck and the stringers, and the condition was found to be more serious than had been anticipated. It was deemed necessary for safety during the winter to strengthen the planking at once and more than 4,000 feet B. M. spruce planks were spiked to the stringers to afford additional support for ends of planking.

Wordsworth Street Footbridge (over Boston, Revere Beach & Lynn Railroad).

A contract was made with Daniel Marr & Son Company, the lowest bidder, dated March 21, 1916, for building a footbridge over the tracks of the Boston, Revere Beach & Lynn Railroad. The work was begun August 10, 1916, and was completed November 11, 1916. The amount paid under the contract was \$2,266.60.

The bridge is of the riveted bowstring type and consists of two girders of 74 feet span center to center of bearings, 10 feet high at the center and spaced 7 feet apart on centers. The floor consists of 8-inch channel floor beams, 9 feet 3 inches on centers, with four lines of 3-inch by 8-inch yellow pine stringers and 2-inch yellow pine floor plan. A rail fence of the Excoelsior Rust Proof type, 4 feet 6 inches high, is attached to each girder, the wires in the fence being No. 9 horizontal and No. 8 vertical in 2 feet by 6 inch-mesh.

At the easterly end the bridge rests on a concrete pier 10 feet long and 22 inches wide, from which a flight of concrete steps leads to the street level. At the westerly end a similar concrete pier supports the bridge and a landing of about 8 feet by 7 feet is provided from which two flights of steps lead to street level. The landing consists of a concrete slab 6 $\frac{3}{4}$ inches thick, reinforced with eight lines of $\frac{1}{2}$ -inch twisted steel rods. All steps

are of reinforced concrete and were cast in moulds before being set. They are 6 feet 11 inches long, 14 inches wide. The six on the east side are $6\frac{1}{2}$ inches high; the six on the west side $6\frac{3}{4}$ inches high. The reinforcement for each step was three lines of $\frac{1}{2}$ -inch twisted steel rods. The exposed faces of all steps have granolithic surfaces. The concrete slab and steps rest on the concrete side-walls, the spaces under the slab and steps being filled in solid with soft coal cinders. The sides of the steps are protected by two rail pipe fences.

Air Tanks.—Fourteen air tanks on various bridges have been overhauled and changes made to meet the requirements of the State Boiler Inspectors' Department, under a contract with the R. & S. Machine Company for \$537.

LIST OF BOSTON BRIDGES.

I. — BRIDGES WHOLLY MAINTAINED BY BOSTON.

[In the list those marked with an asterisk (*) are over navigable waters, and are each provided with a draw.]

In Charge of Bridge and Ferry Division.

Allston, over Boston & Albany Railroad at Cambridge street, Brighton.

Ashland street, over New York, New Haven & Hartford Railroad, Providence Division, West Roxbury.

Athens street, over New York, New Haven & Hartford Railroad, Midland Division.

B street (footbridge), over Neponset river, Hyde Park.

Baker street, at Brook Farm, West Roxbury.

Beacon street, over outlet to Back Bay Fens.

Beacon street, over Boston & Albany Railroad.

Bennington street, over Boston, Revere Beach & Lynn Railroad.

Berkeley street, over Boston & Albany Railroad.

Berwick park (footbridge), over New York, New Haven & Hartford Railroad, Providence Division.

Blakemore street, over New York, New Haven & Hartford Railroad, Providence Division.

Bolton street, over New York, New Haven & Hartford Railroad, Midland Division.

Boylston street, over Boston & Albany Railroad.

Broadway, over Boston & Albany Railroad.

* Broadway, over Fort Point channel.

Brookline avenue, over Boston & Albany Railroad.

Brooks street, Brighton.

Byron street, over Boston, Revere Beach & Lynn Railroad.

Charlesgate, in Fens, over Ipswich street.

* Charlestown, from Boston to Charlestown.

- * Chelsea South (temporary), over south channel, Mystic river.
- * Chelsea street, from East Boston to Chelsea.
- Columbus avenue, over Boston & Albany Railroad.
- * Commercial Point, or Tenean, Dorchester.
- * Congress street, over Fort Point channel.
- Dana avenue, over Neponset river, Hyde Park.
- Dartmouth street, over Boston & Albany Railroad.
- * Dorchester avenue (formerly Federal street), over Fort Point channel.
- * Dover street, over Fort Point channel.
- Fairmount avenue, over Neponset river, Hyde Park.
- Ferdinand street, over Boston & Albany Railroad.
- Florence street, over Stony brook, West Roxbury.
- Gainsborough street (footbridge), over New York, New Haven & Hartford Railroad, Providence Division.
- Glenwood Avenue East (footbridge), over Neponset river, Hyde Park.
- Glenwood Avenue West, over Mother brook, Hyde Park.
- Gold street, over New York, New Haven & Hartford Railroad, Midland Division.
- Gove street (footbridge), over Boston & Albany Railroad, East Boston.
- Huntington avenue, over Boston & Albany Railroad.
- Huntington avenue, over Stony brook, Hyde Park.
- Hyde Park avenue, over Mother brook (at woolen mill), Hyde Park.
- Hyde Park avenue, over Stony brook, West Roxbury.
- Hyde Park avenue, over Stony brook (near Clarendon Hill Station), Hyde Park.
- Ipswich street, in Fens, over waterway.
- Irrington street (footbridge), over New York, New Haven & Hartford Railroad, Providence Division.
- * L street, over Reserved channel, South Boston.
- * Malden, from Charlestown to Everett.
- Massachusetts avenue, over Boston & Albany Railroad.
- Massachusetts avenue, over New York, New Haven & Hartford Railroad, Providence Division.
- * Meridian street, from East Boston to Chelsea.
- Metropolitan avenue (near Clarendon Hills Station), Hyde Park.
- Newburn street, over Stony brook, Hyde Park.
- * Northern avenue, over Fort Point channel.
- Shawmut avenue, over Boston & Albany Railroad and New York, New Haven & Hartford Railroad, Providence Division.
- Southampton street, over South bay sluice.
- Summer street, over A street.
- Summer street, over B street.
- Summer street, over C street.
- * Summer street, over Fort Point channel.

Tollgate way (footbridge), over Providence Division, from Washington street to Hyde Park avenue, Forest Hills.

* Warren, from Boston to Charlestown.

West Newton street, over New York, New Haven & Hartford Railroad, Providence Division.

West River street, over Mother brook, Hyde Park.

West Rutland square (footbridge), over New York, New Haven & Hartford Railroad, Providence Division.

Wordsworth street (footbridge), over Boston, Revere Beach & Lynn Railroad, East Boston.

In Charge of Bridge and Ferry Division and Park and Recreation Department.

Columbia road, over New York, New Haven & Hartford Railroad, Old Colony Division.

Columbia road, over Shoreham street.

In Charge of Park and Recreation Department.

Agassiz road, in Fens.

Audubon road, in Riverway, over Boston & Albany Railroad.

Berners street (footbridge), over Bridle path in Riverway.

Boylston street, in Fens, over waterway.

Bridle path, in Riverway, over Muddy river.

* Castle Island (footbridge), in Marine Park, South Boston, to Castle Island.

Charlesgate, in Fens, over Boston & Albany Railroad.

Circuit drive, over Scarboro pond, in Franklin Park.

Commonwealth avenue, in Fens, over waterway.

Cottage Farm, over Boston & Albany Railroad, at Commonwealth avenue.

Ellicott Arch, in Franklin Park.

Fens, in Fens.

Forest Hills entrance, in Franklin Park.

Leverett pond (footbridge), in Olmsted Park.

Neptune road, in Wood Island Park, over Boston, Revere Beach & Lynn Railroad.

Public Garden (footbridge).

Scarboro pond (footbridge), in Franklin Park.

Wood Island (footbridge), in Wood Island Park.

II.—BRIDGES OF WHICH BOSTON MAINTAINS THE PART WITHIN ITS LIMITS.

In Charge of Bridge and Ferry Division.

Central avenue, from Dorchester to Milton.

* Chelsea North, from Charlestown to Chelsea.

Milton, from Dorchester to Milton.

* Neponset, from Dorchester to Quincy.

Paul's Bridge, over Neponset river, Hyde Park.

Spring street, from West Roxbury to Dedham.

* Western avenue, from Brighton to Watertown.

Winthrop, from Breed's Island to Winthrop.

In Charge of Park and Recreation Department.

Bellevue street, in the Riverway, over Muddy river.
Berners street (footbridge), over Muddy river.
Brookline avenue, in the Riverway, over Muddy river.
Huntington avenue, in the Riverway, over Muddy river.
Longwood avenue, in the Riverway, over Muddy river.

III.—BRIDGES OF WHICH BOSTON PAYS A PART OF THE COST OF MAINTENANCE.

In Charge of Bridge and Ferry Division.

Albany street, over Boston & Albany Railroad (over freight tracks).
Ashmont street and Dorchester avenue, over New York, New Haven & Hartford Railroad, Old Colony Division.
Harvard street, over New York, New Haven & Hartford Railroad, Midland Division.
Morton street, over New York, New Haven & Hartford Railroad, Midland Division.
Norfolk street, over New York, New Haven & Hartford Railroad, Midland Division, near Dorchester station.
Pleasant street, over the subway.

In Charge of Commissioners for Boston and Cambridge Bridges.

Anderson Bridge, from Brighton to Cambridge.
Brookline street, from Brighton to Cambridge.
Cambridge, from Boston to Cambridge.
* Cambridge street, from Brighton to Cambridge.
* Harvard, from Boston to Cambridge.
* Prison Point, from Charlestown to Cambridge.
* Western avenue, from Brighton to Cambridge.

In Charge of Commissioners for Granite Avenue Bridge.

* Granite avenue, from Dorchester to Milton.

IV.—BRIDGES OF WHICH BOSTON MAINTAINS THE WHOLE OR A PART OF THE WEARING SURFACE.

In Charge of the Bridge and Ferry Division.

Austin street, over Boston & Maine Railroad, Charlestown.
Bennington street, over Boston & Albany Railroad.
Blue Hill avenue, over New York, New Haven & Hartford Railroad, Midland Division.
Boston street, over New York, New Haven & Hartford Railroad, Old Colony Division.
Brookline street, Brighton to Cambridge, portion over Boston & Albany Railroad.
Cambridge street, Charlestown, over Boston & Maine Railroad.
Chelsea, over Boston & Maine Railroad.
Curtis street, East Boston, over Boston & Albany Railroad.

Dana avenue, over New York, New Haven & Hartford Railroad, Midland Division, Hyde Park.
Dorchester avenue, over New York, New Haven & Hartford Railroad, Old Colony Division.
Everett street, over Boston & Albany Railroad, Brighton.
Fairmount avenue, over New York, New Haven & Hartford Railroad, Midland Division, and Station street, Hyde Park.
Glenwood Avenue West, over passageway connecting land of the New York, New Haven & Hartford Railroad, Hyde Park.
Hyde Park avenue, over proposed electric connection between Midland and Providence Divisions, New York, New Haven & Hartford Railroad, Hyde Park.
Maverick street, East Boston, over Boston & Albany Railroad.
Milton street, Hyde Park, over New York, New Haven & Hartford Railroad.
Mystic avenue, over Boston & Maine and Boston & Albany Railroads.
New Allen street, Hyde Park, over New York, New Haven & Hartford Railroad.
Norfolk street, over New York, New Haven & Hartford Railroad, Midland Division, near Blue Hill Avenue Station.
Oakland street, over New York, New Haven & Hartford Railroad, Midland Division, Mattapan.
Perkins street (footbridge), over Boston & Maine Railroad.
Porter street, over Boston & Albany Railroad.
Prescott street, over Boston & Albany Railroad.
Redfield street, at Neponset, over New York, New Haven & Hartford Railroad, Old Colony Division.
Reservoir road, Brighton, over Boston & Albany Railroad, Newton Branch.
Saratoga street, over Boston & Albany Railroad.
Saratoga street, over Boston, Revere Beach & Lynn Railroad, East Boston.
Southampton street, over New York, New Haven & Hartford Railroad, Old Colony Division.
Sprague street, over New York, New Haven & Hartford Railroad, Midland Division, and branch of Providence Division, Hyde Park.
Summer street, over New York, New Haven & Hartford Railroad, Midland Division.
Sumner street, East Boston, over Boston & Albany Railroad.
Webster street (footbridge), East Boston, over Boston & Albany Railroad.
West Fourth street, over New York, New Haven & Hartford Railroad, Old Colony Division.

V.—BRIDGES MAINTAINED BY METROPOLITAN PARK COMMISSION.

- * Charles River Dam.
- Mattapan, over Neponset river.
- * North Beacon street, from Brighton to Watertown.

VI.— BRIDGES WHOLLY MAINTAINED BY RAILROAD CORPORATIONS.

1st.— Boston & Albany.

Albany street (over passenger tracks).
Harrison avenue.
Market street, Brighton.
Tremont street.
Washington street.

2d.— Boston & Maine and Boston & Albany Railroads.

Main street.

3d.— Boston & Maine Railroad, Eastern Division.

Wauwatosa avenue, East Boston.

4th.— Boston, Revere Beach & Lynn Railroad.

Everett street.

5th.— New York, New Haven & Hartford Railroad, Midland Division.

Dorchester avenue.
East River street, at River Street Station, Hyde Park.
Silver street.
Washington street, Dorchester.
West Broadway.
West Fifth street.
West Fourth street.
West Second street.
West Sixth street.
West Third street.

6th.— New York, New Haven & Hartford Railroad, Old Colony Division.

Adams street.
Cedar Grove Cemetery.
Medway street.
Savin Hill avenue.

7th.— New York, New Haven & Hartford Railroad, Providence Division.

Albany street.
Baker street, West Roxbury.
Beech street, West Roxbury.
Bellevue street, West Roxbury.
Berkeley street.
Broadway, South Boston.
Canterbury street, West Roxbury.
Castle square.
Centre and Mt. Vernon streets, West Roxbury.
Columbus avenue.
Dartmouth street.

Gardner street, West Roxbury.
 Harrison avenue.
 Park street, West Roxbury.
 Walworth street, West Roxbury.
 Washington street.
 West street, Hyde Park.
 West River street, Hyde Park.

RECAPITULATION OF BRIDGES.

| | | |
|------|--|------------|
| I. | Number wholly maintained by Boston: | |
| | In charge of Bridge and Ferry Division | 64 |
| | In charge of Bridge and Ferry Division and Park and Recreation Department | 2 |
| | In charge of Park and Recreation Department | 18 |
| | | — 84 |
| II. | Number of which Boston maintains the part within its limits: | |
| | In charge of Bridge and Ferry Division | 8 |
| | In charge of Park and Recreation Department | 5 |
| | | — 13 |
| III. | Number of which Boston pays a part of the cost of maintenance: | |
| | In charge of Bridge and Ferry Division | 6 |
| | In charge of Commissioners for Boston and Cambridge Bridges | 7 |
| | In charge of Commissioners for Granite Avenue Bridge | 1 |
| | | — 14 |
| IV. | Number of which Boston maintains the whole or a part of the wearing surface | 33 |
| V. | Number maintained by Metropolitan Park Commission | 3 |
| VI. | Number maintained by railroad corporations: | |
| | 1. Boston & Albany Railroad | 5 |
| | 2. Boston & Maine and Boston & Albany Railroads | 1 |
| | 3. Boston & Maine Railroad, Eastern Division | 1 |
| | 4. Boston, Revere Beach & Lynn Railroad, | 1 |
| | 5. New York, New Haven & Hartford Railroad, Midland Division | 10 |
| | 6. New York, New Haven & Hartford Railroad, Old Colony Division | 4 |
| | 7. New York, New Haven & Hartford Railroad, Providence Division | 18 |
| | | — 40 |
| | Total number | <u>187</u> |

List of Small Bridges or Culverts having Wooden Tops which are Repaired by Bridge and Ferry Division
(Bridge Service). — Walls Repaired and Openings Cleaned by Sewer Service.

| LOCATION. | Span, feet. | Height of Opening, feet. | Length, feet. | Side Walls. | Covering. |
|--|----------------|--------------------------------|------------------|-------------|-----------|
| Ashland and Canterbury streets, near Calvary Cemetery, West Roxbury, | 7.6 | 5.5 | 75 | Stone. | Wood. |
| Beech street, near Anawan avenue, at Central Station, West Roxbury . . . | 4.0 | 4.0 | 50 | Stone. | Wood. |

Table Showing the Widths of Channelways for Vessels in all Bridges
Provided with Draws in the City of Boston in January, 1917.

| NAME OF BRIDGE. | Location. | Number of Channelways. | Width. |
|---|-------------------------------|---------------------------|-------------------|
| * Anderson..... | Brighton to Cambridge..... | 1 | 45 feet 0 inches. |
| Boston Elevated Railway..... | Boston to East Cambridge..... | 1 | 45 " 0 " |
| Boston & Maine Railroad, Eastern Division. | Boston to Charlestown..... | 1 | 39 " 8 " |
| Boston & Maine Railroad, Eastern Division. | Over Miller's river..... | 1 | 35 " 0 " |
| Boston & Maine Railroad, Fitchburg Division. | Boston to Charlestown..... | 1 | 36 " 0 " |
| Boston & Maine Railroad, Fitchburg Division (for teaming freight). | " "..... | 1 | 36 " 7 " |
| Boston & Maine Railroad (freight), Southern Division. | Boston to East Cambridge..... | 1 | 40 " 0 " |
| Boston & Maine Railroad (passenger), Southern Division. | " "..... | 1 | 39 " 8 " |
| Boston & Maine Railroad, Western Division. | Boston to Charlestown..... | 1 | 39 " 4 " |
| Boston & Maine Railroad, Western Division. | Over Miller's river..... | 1 | 35 " 6 " |
| Broadway..... | Over Fort Point channel..... | 1 | 50 " 0 " |
| † Brookline street..... | Brighton to Cambridge..... | 1 | 40 " 0 " |
| † Cambridge..... | Boston to Cambridge..... | 1 | 50 " 0 " |
| Cambridge street..... | Brighton to Cambridge..... | 1 | 36 " 6 " |
| Charles River Dam (lock)..... | Boston to East Cambridge..... | 1 | 45 " 0 " |
| Charlestown (main channel)..... | Boston to Charlestown..... | 2 | { 50 " 0 " |
| Charlestown (north channel)..... | " "..... | | { 49 " 9 " |
| Chelsea (north channel)..... | Charlestown to Chelsea..... | 2 | 125 " 0 " |
| Chelsea (south channel)..... | " "..... | 1 | 48 " 0 " |
| Chelsea street..... | East Boston to Chelsea..... | 1 | 60 " 0 " |
| Commercial Point (or Tenean)..... | Dorchester..... | 1 | 24 " 0 " |
| Congress street..... | Over Fort Point channel..... | 1 | 50 " 0 " |
| Dorchester avenue..... | " "..... | 1 | 41 " 3 " |
| Dover street..... | " "..... | 1 | 40 " 6 " |
| Grand Junction Railroad..... | Brighton to Cambridge..... | 1 | 39 " 3 " |
| Grand Junction Railroad..... | East Boston to Chelsea..... | 1 | 60 " 0 " |
| Granite avenue..... | Dorchester to Milton..... | 1 | 50 " 0 " |
| Harvard (Boston side)..... | Boston to Cambridge..... | 2 | { 36 " 7 " |
| Harvard (Cambridge side)..... | " "..... | | { 37 " 0 " |

* Drawless channelway; clear headroom of 12 feet above basin level (about elevation 8.0).

† Drawless channelway; clear headroom of 28 feet above basin level.

Table Showing Widths of Channelways, etc.— *Concluded.*

| NAME OF BRIDGE. | Location. | Number of Channelways. | Width. |
|---|--------------------------------------|------------------------|-------------------|
| L street..... | Over Reserved channel, South Boston. | 1 | 39 feet 3 inches. |
| Malden..... | Charlestown to Everett..... | 1 | 50 " 0 " |
| Meridian street..... | East Boston to Chelsea..... | 1 | 100 " 0 " |
| Neponset..... | Dorchester to Quincy..... | 1 | 36 " 0 " |
| New York, New Haven & Hartford Railroad. | Over Fort Point channel..... | 1 | 41 " 8 " |
| New York, New Haven & Hartford Railroad, Plymouth Division. | Dorchester to Quincy..... | 1 | 51 " 0 " |
| North Beacon street..... | Brighton to Watertown..... | 1 | 30 " 0 " |
| Northern avenue..... | Over Fort Point channel..... | 2 | 75 " 3 " |
| Prison Point..... | Charlestown to Cambridge.... | 1 | 37 " 4 " |
| Summer street..... | Over Fort Point channel..... | 1 | 50 " 0 " |
| Warren..... | Boston to Charlestown..... | 1 | 36 " 0 " |
| Western avenue..... | Brighton to Cambridge..... | 1 | 36 " 0 " |
| Western avenue..... | Brighton to Watertown..... | 1 | 36 " 0 " |

Table Showing Number of Vessels Passing through Drawbridges, February 1, 1916, to January 31, 1917.

| BRIDGE. | STREAMERS. | | | SAILING VESSELS. | | | TUGS. | | | BARGES. | | | ALL OTHERS. | | | TOTAL NUMBER VESSELS. | | | Total Number of Carries. | Total Number of Openings. |
|--------------------------------|------------|-----------|--------|------------------|-----------|--------|---------|-----------|--------|---------|-----------|--------|-------------|-----------|--------|-----------------------|-----------|---------|--------------------------|---------------------------|
| | By Day. | By Night. | Tot l. | By Day. | By Night. | Total. | By Day. | By Night. | Total. | By Day. | By Night. | Total. | By Day. | By Night. | Total. | By Day. | By Night. | Total. | | |
| | | | | | | | | | | | | | | | | | | | | |
| Broadway..... | 54 | 5 | 59 | 301 | 8 | 309 | 3,438 | 102 | 3,540 | 748 | 32 | 780 | 1,106 | 67 | 1,173 | 5,647 | 214 | 5,861 | 1,182 | 2,031 |
| Charlestown..... | | | | 218 | 11 | 229 | 2,591 | 165 | 2,756 | 771 | 55 | 826 | 1,023 | 598 | 1,621 | 4,603 | 829 | 5,432 | 1,312 | 2,425 |
| Chelsea North..... | 876 | 187 | 1,063 | 222 | 30 | 252 | 11,416 | 3,037 | 14,453 | 852 | 90 | 942 | 6,294 | 2,037 | 8,331 | 19,660 | 5,381 | 25,041 | 5,532 | 9,934 |
| Chelsea South..... | 22 | 6 | 28 | 107 | 10 | 117 | 6,662 | 573 | 7,235 | 196 | 6 | 202 | 4,480 | 405 | 4,885 | 11,467 | 1,000 | 12,467 | 3,442 | 5,587 |
| Chelsea street..... | | 1 | 1 | 4 | 2 | 6 | 1,093 | 502 | 1,595 | 1 | 1 | 2 | 1,036 | 416 | 1,452 | 2,134 | 922 | 3,056 | 689 | 1,656 |
| Congress street..... | 183 | 20 | 203 | 342 | 31 | 373 | 5,788 | 454 | 6,242 | 796 | 70 | 866 | 1,939 | 108 | 2,107 | 9,048 | 743 | 9,791 | 1,219 | 5,025 |
| Dorchester avenue..... | 56 | 9 | 65 | 297 | 15 | 312 | 3,347 | 195 | 3,542 | 704 | 54 | 758 | 1,299 | 107 | 1,406 | 5,703 | 380 | 6,083 | 1,157 | 3,297 |
| Dover street..... | 47 | 10 | 57 | 294 | 14 | 308 | 3,235 | 193 | 3,428 | 676 | 54 | 730 | 1,131 | 96 | 1,227 | 5,383 | 367 | 5,750 | 1,148 | 2,382 |
| Granite avenue..... | | | | 8 | | 8 | 356 | | 356 | 87 | | 87 | 489 | | 489 | 940 | | 940 | 56 | 677 |
| L street..... | 12 | 1 | 13 | 102 | 10 | 112 | 2,419 | 231 | 2,650 | 162 | 9 | 171 | 1,548 | 220 | 1,768 | 4,243 | 471 | 4,714 | 593 | 3,382 |
| Malden..... | 4 | | 4 | 55 | 5 | 60 | 1,584 | 156 | 1,740 | 739 | 131 | 870 | 346 | 71 | 417 | 2,728 | 363 | 3,091 | 611 | 1,778 |
| Meridian street..... | 423 | 199 | 622 | 215 | 18 | 233 | 9,485 | 2,152 | 11,637 | 630 | 144 | 774 | 4,858 | 1,067 | 5,925 | 15,611 | 3,580 | 19,191 | 2,453 | 10,969 |
| Neponset..... | | | | 2 | | 2 | 413 | 8 | 421 | 101 | 2 | 103 | 612 | | 612 | 1,128 | 10 | 1,138 | 43 | 848 |
| North Beacon street..... | | | | | | | | | | | | | 11 | | 11 | 11 | | 11 | 4 | 4 |
| Northern avenue..... | 1,016 | 678 | 1,693 | 366 | 24 | 390 | 8,630 | 876 | 9,506 | 893 | 62 | 955 | 3,673 | 354 | 4,027 | 14,577 | 1,994 | 16,571 | 2,800 | 7,373 |
| Summer street..... | 183 | 20 | 203 | 342 | 31 | 373 | 5,788 | 454 | 6,242 | 796 | 70 | 866 | 1,939 | 108 | 2,107 | 9,048 | 743 | 9,791 | 1,219 | 5,044 |
| Warren..... | 16 | 4 | 20 | 207 | 12 | 219 | 2,324 | 137 | 2,461 | 803 | 47 | 850 | 941 | 603 | 1,544 | 4,291 | 803 | 5,094 | 1,183 | 3,247 |
| Western ave. to Watertown..... | | | | | | | 6 | 2 | 8 | | | | 8 | 4 | 12 | 14 | 6 | 20 | 5 | 10 |
| Totals..... | 2,801 | 1,140 | 4,031 | 3,082 | 221 | 3,303 | 68,675 | 9,237 | 77,912 | 8,955 | 827 | 9,782 | 32,723 | 6,381 | 39,114 | 116,236 | 17,806 | 134,042 | 24,648 | 65,060 |

ELEVATIONS AND DATUM PLANES REFERRED TO BOSTON CITY BASE.

Feet.

- * 0.00 Boston city base. This base is used by the towns of Brookline and Watertown and the cities of Chelsea, Everett, Malden, Newton and Waltham.
- 4.98 Cambridge city base.
- +0.64 Somerville city base.
- 0.00 Metropolitan Park Commission base.
- +0.60 Harbor and Land Commission and Directors of the Port of Boston base.
- 0.00 Metropolitan Water Board base.
- 100.00 Metropolitan Sewerage Board base.
- 100.00 Boston Transit Commission base.
- 100.00 Charles River Commission base.
- 15.45 Old bench mark on coping of old dry dock at Charlestown Navy Yard.
- 15.11 New bench mark on coping of old dry dock at Charlestown Navy Yard, northwest end over crowfoot.
- 5.00 Piles to be cut off for building.
- 12.00 Minimum cellar bottom elevation when not waterproofed.
- 9.82 South Boston base. Formerly in use, now abandoned.
- 0.00 Mean low water about 1830.†
- +0.34 Mean low water, 1867.†
- +0.79 Mean low water, 1902.†
- +0.58 Navy Yard base, 1902.†
- 10.63 Mean high water, 1902.†
- 5.71 Mean sea level, 1902.†
- 9.84 Mean rise and fall of tide, 1902.†

* Definition of Boston city base: "Boston city base is a datum plane 15 feet above the average height of the sill of the Charlestown dry dock." (Page 552, report of Committee on Charles River Dam, 1903.)

† John R. Freeman, civil engineer, in report to Committee on Charles River Dam, 1903, pp. 562, 569, 570.

HIGHEST RECORDED TIDES.

Feet.

15.62 April 16, 1851, average of seven observations, North Market street and vicinity, leveled on in 1854 by Charles Harris, Surveying Division n. b. 22, p. 54 (15.10 above mean low water, United States Coast Survey Chart of Boston Harbor, 1857).

15.64 December 26, 1909, average of twenty-nine observations, on water front, Nut Island to Deer Island, elevations determined in most cases by John H. Edmonds, before January 1, 1910, from points put in for that purpose, 1902 to 1905.

15.50 December 26, 1909, actual elevation at North Ferry, Boston proper, as observed on staff gauge, at high water.

From comparison of contemporary diary and newspaper accounts the only tide of this class prior to 1851, found by John H. Edmonds, was that of February 24, 1722-23, which was in all probability about 16.00.

The following tidal records may be of interest:

High Tides.

[Plane of Reference, Boston City Base.]

| Feet. | Date. | Where Taken. | By Whom. |
|-------|--------------------|---|-----------------|
| 16.00 | Feb. 24, 1722-23. | By comparison..... | J. H. Edmonds. |
| 15.62 | April 16, 1851.... | Average of 7 observations..... | Charles Harris. |
| 15.74 | April 16, 1851.... | Navy Yard, staff gauge..... | Isaac Williams. |
| 14.15 | Jan. 23, 1898.... | Charlestown Bridge and East Boston Ferries. | |
| 14.94 | Nov. 27, 1898.... | Average of 15 observations. | |
| 13.72 | Nov. 8, 1900.... | Malden Bridge..... | F. P. Spalding. |
| 14.19 | Nov. 25, 1901.... | Average of 10 observations. | |
| 13.60 | Dec. 14, 1902.... | Average of 11 observations. | |
| 14.83 | Jan. 25, 1905.... | Average of 34 observations. | |
| 14.70 | Jan. 25, 1905.... | Inner harbor, 10 observations. | |
| 14.70 | Jan. 25, 1905.... | North Ferry, Boston proper..... | J. H. Edmonds. |
| 13.50 | Nov. 15, 1906.... | Neponset Bridge..... | M. F. Toomey. |
| 15.64 | Dec. 26, 1909.... | Average of 29 observations. | |
| 15.50 | Dec. 26, 1909.... | North Ferry, Boston proper (a. m.)..... | J. H. Edmonds. |

High Tides.— Concluded.

| Feet. | Date. | Where Taken. | By Whom. |
|-------|-------------------|---|-----------------|
| 11.90 | Dec. 26, 1909.... | North Ferry, Boston proper (p. m.)..... | J. H. Edmonds. |
| 13.50 | Dec. 26, 1913.... | North Ferry, Boston proper..... | F. P. Spalding. |
| 13.90 | Nov. 20, 1914.... | Malden Bridge..... | H. H. McNerlin. |
| 14.30 | Jan. 13, 1915.... | North Ferry, Boston proper..... | F. P. Spalding. |
| 14.62 | Jan. 13, 1915.... | Granite Avenue Bridge..... | G. A. Clough. |

Low Tides.

| | | | |
|-------|-------------------|---|-----------------------|
| 5.60 | Nov. 27, 1898.... | Deer Island, metropolitan sewer station.... | Self-recording gauge. |
| -3.50 | Feb. 1, 1900.... | Deer Island, metropolitan sewer station.... | Self-recording gauge. |
| -2.94 | Feb. 3, 1900.... | South Boston station, Edison Electric..... | D. A. Herrington. |
| -3.00 | Feb. 4, 1904.... | Deer Island, metropolitan sewer station.... | Self-recording gauge. |
| -3.00 | Mar. 23, 1905.... | Deer Island, metropolitan sewer station.... | Self-recording gauge. |

FERRY SERVICE.

A new pump and jet condenser were installed on the "Noddle Island," the work being done partly by day labor and partly by contract.

All of the boats had new planking put on the roadways, this work being done by employees of the Ferry Service.

The woodwork on the East Boston end of the "Noddle Island" and on the East Boston end of the "General Hancock" and the cross frames and the keelsons under the boilers of the "Hugh O'Brien" were found to be in dangerous condition and contracts were made for repairs. The new end on the "General Hancock" was built by the McKie Shipbuilding Company, the twelve new frames with new keelsons under the boilers of the "Hugh O'Brien," as well as the new end on the "Noddle Island," were built by James E. Quirk.

A new ruling of the Steamboat Inspectors required that the portholes and the openings between the deck beams be closed and this work was all done under contract. A large amount of painting has been done, almost entirely by ferry employees, with the result that the buildings and boats present a far better appearance than for years past.

The "Hugh O'Brien," "Noddle Island," "Governor Russell" and "General Hancock" were pulled out either into dry dock or on a marine railway and the bottoms cleaned.

The yellow metal on the "Noddle Island" and "Governor Russell" was patched; that on the "Hugh O'Brien" was in such bad condition that what was left was taken off and the bottom painted, this work on the "O'Brien" being included in the contract of James E. Quirk, previously mentioned. The bottom of the "General Hancock" was also painted. Some of these boats had not been out for several years and the bottoms were in very foul condition. Minor repairs have also been made on the buildings, drops and boats.

The following steam ferryboats are in commission:

| NAME. | When Built. | Kind. | Length. | Gross Tonnage. |
|-----------------------|----------------|------------|---------------|-------------------|
| D. D. Kelly..... | 1879 | Side wheel | 160 ft. 3 in. | 550 |
| Hugh O'Brien..... | 1883 | " | 175 " 3 " | 645 |
| General Hancock..... | 1887 | " | 160 " 3 " | 577 |
| Governor Russell..... | 1898 | Propeller | 164 " 3 " | 713 |
| Noddle Island..... | 1899 | " | 164 " 3 " | 710 |
| General Sumner..... | 1900 | " | 164 " 3 " | 703 |
| John H. Sullivan..... | 1912 | " | 172 " 3 " | 826 |

FINANCIAL STATEMENT FOR THE YEAR ENDING JANUARY 31, 1917.

1. Receipts.

| | |
|---|--------------------|
| Total cash receipts during the year | \$95,125 14 |
| Cash in hands of tollmen at beginning of year | 200 00 |
| Cash in hands of cashier February 1, 1916 | 282 74 |
| | <u>\$95,607 88</u> |
| Cash paid over to City Collector | \$95,407 88 |
| Cash in hands of tollmen January 31, 1917 | 200 00 |
| | <u>\$95,607 88</u> |

2. Appropriations and Expenditures.

| | |
|---|-------------------|
| Balance unexpended from previous years (special appropriations) | \$2,015 60 |
| Received by transfer from Bridge Service | 112 17 |
| Received from annual appropriation | 298,115 75 |
| Received by transfer from Bridge Service | 5,801 43 |
| Total appropriations | \$306,044 95 |
| Total expenditures | 304,269 95 |
| Balance unexpended (special appropriation) | <u>\$1,775 00</u> |

3. Result of Operations for the Year.

| | |
|--|-------------------------------------|
| Receipts for the year (net income) | \$95,125 14 |
| Ordinary expenses | \$303,917 18 |
| Interest paid on ferry debt | 14,987 91 |
| Depreciation of ferryboats | 13,340 13 |
| | <u>\$332,245 22</u> |
| Less increase in stock of supplies | \$2,243 63 |
| Carried forward | \$2,243 63 \$332,245 22 \$95,125 14 |

| | | | |
|---|------------|--------------|---------------------|
| <i>Brought forward</i> . | \$2,243 63 | \$332,245 22 | \$95,125 14 |
| Less increase in stock of fuel | 3,235 31 | | |
| Less increase of stock of machinery and tools | 65 00 | | |
| | | 5,543 94 | |
| Net outgo for the year | | | 326,701 28 |
| Net loss for the year | | | <u>\$231,576 14</u> |

4. Balance Sheet.
End of Fiscal Year January 31, 1917.

| Assets. | | LIABILITIES. | |
|--|----------------|--|-----------------|
| AVAILABLE ASSETS: | | CURRENT LIABILITIES: | |
| Cash in hands of tollmen at close of year..... | \$200 00 | None. | |
| Inventory of supplies, vis.: | | | |
| Fuel..... | \$7,703 04 | | |
| Supplies for maintenance..... | 4,580 00 | | |
| Rents receivable..... | 12,283 04 | | |
| | 33 40 | | |
| Total available assets..... | \$12,516 44 | | |
| CONTINGENT ASSETS: | | CONTINGENT LIABILITIES: | |
| City Treasury..... | 1,775 00 | Appropriations account..... | \$1,775 00 |
| FIXED ASSETS: | | FIXED LIABILITIES: | |
| Real estate, land and buildings ¹ | * 610,100 00 | Capital of the city invested in the ferries, vis.: | |
| Ferryboats ² | 208,995 39 | Total expenditures of all kinds for fifty- | |
| Machinery, tools, etc..... | 3,080 00 | nine years, including interest on ferry | |
| | | debt..... | \$13,254,569 94 |
| Total tangible assets..... | \$338,466 83 | Less total receipts..... | 7,298,995 25 |
| Avenues, etc., East Boston ³ | 315,815 68 | | |
| Deficiency or loss by operation and maintenance | | | |
| of the ferries for fifty-nine years to date..... | 4,805,067 18 | | |
| | | | 5,955,574 69 |
| | \$5,957,349 69 | | \$5,957,349 69 |

¹ Original purchase of ferries..... \$276,375 00
 New buildings, drops, slips, etc., cost to date... 607,523 64
 Land, Lincoln's Wharf, cost, 1887..... 5,562 52
 Land, Battery Wharf, cost, 1893..... 10,000 00
 \$899,461 16

² Assessors' figures.
³ Total cost to date, per ferry books..... \$743,070 58
 Less boats sold, depreciated or destroyed..... 534,075 19
 \$208,995 39

* Cost (net) previous to 1870, per ferry books, vis.:
 Expenditures for avenues..... \$280,000 00
 Expenditures for improvements..... 65,815 68
 \$315,815 68

* These expenditures were practically subsidies to the East Boston Ferry Company by the city before the ferries were purchased by the latter and should be added to the deficiency or loss.

Comparison of Receipts, Appropriations and Expenditures for Five Years.

| | 1912-13. | 1913-14. | 1914-15. | 1915-16. | 1916-17. |
|---|--------------|--------------|--------------|--------------|-------------|
| RECEIPTS. | | | | | |
| From foot passengers (tollmen)..... | \$57,598 10 | \$58,163 78 | \$57,762 50 | \$54,285 67 | \$44,048 14 |
| “ foot passes (office sales)..... | 620 70 | 677 80 | 589 60 | 557 40 | 566 70 |
| “ extra passengers on teams (gatemmen)..... | 1,283 85 | 1,620 47 | 1,886 29 | 1,935 17 | 1,721 33 |
| “ team tickets (office sales)..... | 1,308 50 | 1,314 50 | 654 00 | 1,694 00 | 2,661 50 |
| “ strip team tickets (tollmen)..... | 24,753 50 | 23,567 00 | 23,711 50 | 24,062 50 | 23,142 00 |
| “ cash fares for teams (gatemmen)..... | 18,960 14 | 18,843 01 | 20,016 24 | 21,681 01 | 21,202 55 |
| “ free ferries July 4..... | 1 00 | 1 00 | 1 00 | 1 00 | 1 00 |
| Total from rates..... | \$104,525 79 | \$104,187 56 | \$104,621 13 | \$104,216 75 | \$93,343 22 |
| From rents..... | 492 00 | 514 00 | 497 00 | 560 10 | 564 00 |
| “ old material sold..... | 149 50 | 74 00 | 141 26 | 258 16 | 594 78 |
| “ other sources..... | 2,391 74 | 1,551 52 | 656 05 | 922 75 | 623 14 |
| Total ordinary receipts..... | \$107,559 03 | \$106,327 08 | \$105,915 44 | \$105,957 76 | \$95,125 14 |
| EXPENDITURES (ORDINARY). | | | | | |
| Office: K. E. J. ^{W. E. J.} | \$2,500 00 | \$2,500 00 | \$1,310 77 | ..... | \$1,250 00 |
| Division engineer's salary (part) *..... | 3,300 00 | 3,366 66 | 13,753 75 | \$3,758 41 | 4,341 44 |
| General foreman and cashier †..... | ..... | 117 50 | 900 00 | 900 00 | 765 00 |
| Clerks †..... | 4,912 37 | 5,205 33 | 6,132 74 | 4,887 51 | 4,739 45 |
| Retired veterans' pensions..... | ..... | 572 45 | 952 15 | 1,639 14 | 2,246 15 |
| Retired employees' pensions..... | ..... | ..... | 1,388 18 | 197 67 | ..... |
| Engineers' roll (part) *..... | ..... | ..... | ..... | ..... | 83 00 |
| Medical inspector (part)..... | ..... | ..... | ..... | ..... | 117 59 |
| Stationary..... | 218 72 | 164 23 | 171 40 | 117 70 | ..... |
| Printing..... | 1,201 81 | 1,785 94 | 2,233 37 | 1,124 86 | 1,258 39 |
| Telephones..... | 248 06 | 245 44 | 256 98 | 267 34 | 299 54 |
| Advertising..... | 32 40 | 56 80 | 16 20 | 10 80 | 34 60 |
| Car fares..... | 74 85 | 81 00 | 84 58 | 63 00 | 75 00 |
| Postage..... | 2 00 | 6 00 | 2 00 | 6 00 | 6 00 |
| Premiums, surety companies..... | 108 00 | 82 11 | 83 75 | 85 75 | 90 00 |
| Total, office expenses..... | \$12,598 21 | \$14,183 46 | \$17,285 87 | \$13,058 18 | \$15,306 16 |

| | | | | | |
|---|--------------|--------------|--------------|--------------|--------------|
| Ferryboats and landings: | | | | | |
| Employees (wages)..... | 170,024 48 | 174,875 31 | 177,095 53 | 183,542 57 | 182,903 30 |
| Fuel..... | 38,588 73 | 36,437 11 | 47,286 86 | 34,338 83 | 54,800 04 |
| Teaming, weighing coal, etc..... | 2,969 12 | 3,032 21 | 2,808 21 | 2,359 15 | 3,195 97 |
| Supplies..... | 7,528 33 | 6,250 18 | 7,086 89 | 7,218 64 | 7,708 20 |
| Oils..... | 1,422 41 | 1,508 16 | 1,476 58 | 1,691 65 | 1,782 43 |
| Gas..... | 600 10 | 634 41 | 536 32 | 484 00 | 531 50 |
| Electric light..... | 3,929 04 | 4,090 55 | 4,217 30 | 4,154 54 | 3,847 14 |
| Towing teams by electric motors..... | 154 08 | 112 82 | 185 90 | 184 68 | 270 45 |
| Repairs of boats..... | 19,650 80 | 26,197 95 | 26,642 34 | 22,848 72 | 29,468 14 |
| Repairs of buildings, piers and drops..... | 10,185 41 | 8,882 71 | 7,390 31 | 5,996 81 | 3,290 18 |
| Furnishings..... | 527 53 | 433 12 | 580 16 | 234 80 | 227 25 |
| Other expenditures †..... | 838 28 | 1,089 40 | 1,079 16 | 935 90 | 496 42 |
| Total from regular annual appropriations..... | \$269,016 52 | \$277,727 39 | \$293,671 43 | \$277,048 47 | \$303,917 18 |
| EXPENDITURES FROM SPECIAL APPROPRIATIONS. | | | | | |
| Repairing ferryboat "General Sumner"..... | | | 500 00 | | |
| New ferryboats..... | 61,870 69 | | | | 127 77 |
| Ferry landings, repairs..... | 40,579 44 | 7,532 51 | | | 225 00 |
| Ferry improvements..... | | | | | |
| Auxiliary lighting plant..... | | | | | |
| Total expenditures, regular and special..... | \$371,466 65 | \$285,259 90 | \$294,171 43 | \$277,048 47 | \$304,269 95 |
| Balances in treasury unexpended..... | 8,048 11 | 515 60 | 15 60 | 2,015 60 | 1,775 00 |
| APPROPRIATIONS. | | | | | |
| Regular annual appropriations..... | \$269,016 52 | \$277,727 39 | \$293,671 43 | \$255,000 00 | \$298,115 75 |
| Transfers from other sources §..... | | | | 22,048 47 | 5,801 43 |
| Special appropriations: | | | | | |
| Ferry landings, repairs §..... | | | | | 112 17 |
| Auxiliary lighting plant..... | | | | 2,000 00 | |
| | \$269,016 52 | \$277,727 39 | \$293,671 43 | \$279,048 47 | \$304,029 35 |

* Remainder paid by Bridge Service.
† Includes repair of coal carts, analysis of coal, expressage, use of towboats, medical attendance, and report of coal expert.
‡ Part of appropriation for Bridge and Ferry Division applied to "Ferry Service."

Comparative Balance Sheets at the Close of Each Year for Five Years.

| | January 31, 1913. | January 31, 1914. | January 31, 1915. | January 31, 1916. | January 31, 1917. |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <i>Assets.</i> | | | | | |
| Cash, balance on hand..... | | \$390 06 | \$395 59 | \$282 74 | |
| Cash, tollmen's capital..... | \$200 00 | 200 00 | 200 00 | 200 00 | \$200 00 |
| Rents receivable..... | 22 00 | 22 00 | 39 00 | 42 90 | 33 40 |
| Fuel and supplies in stock..... | 10,877 63 | 9,265 62 | 14,375 75 | 6,804 10 | 12,283 04 |
| City Treasurer (balance of appropriation)..... | 8,048 11 | 515 60 | 15 60 | 2,015 60 | 1,775 00 |
| Ferryboats (less depreciation)..... | 267,685 78 | 251,624 63 | 236,527 15 | 222,335 52 | 208,995 39 |
| Machinery and tools..... | 3,378 55 | 3,040 69 | 3,350 00 | 3,015 00 | 3,080 00 |
| Real estate, land and buildings (assessors' valuation)..... | 641,800 00 | 610,200 00 | 610,200 00 | 610,100 00 | 610,100 00 |
| Total tangible assets..... | \$932,012 07 | \$875,258 60 | \$865,103 09 | \$844,795 86 | \$836,466 83 |
| Cost of avenues, etc., East Boston (previous to 1870) ¹ | 315,815 68 | 315,815 68 | 315,815 68 | 315,815 68 | 315,815 68 |
| Deficiency of assets (loss)..... | 3,905,960 81 | 4,150,659 65 | 4,364,388 68 | 4,573,128 77 | 4,805,067 18 |
| Totals..... | <u>\$5,153,788 56</u> | <u>\$5,341,733 93</u> | <u>\$5,545,307 45</u> | <u>\$5,733,740 31</u> | <u>\$5,957,349 69</u> |
| <i>Liabilities.</i> | | | | | |
| Capital invested by the City of Boston to date..... | \$5,145,740 45 | \$5,341,218 33 | \$5,545,291 85 | \$5,731,724 71 | \$5,955,574 69 |
| Appropriations account (credit balances)..... | 8,048 11 | 515 60 | 15 60 | 2,015 60 | 1,775 00 |
| Total liabilities..... | <u>\$5,153,788 56</u> | <u>\$5,341,733 93</u> | <u>\$5,545,307 45</u> | <u>\$5,733,740 31</u> | <u>\$5,957,349 69</u> |

Details of Capital Invested by the City of Boston.

| | | | | | |
|--|------------------------|------------------------|------------------------|------------------------|------------------------|
| Total expenditures to date, per ferry books..... | \$11,674,764 87 | \$11,977,239 77 | \$12,287,566 20 | \$12,580,429 67 | \$12,900,154 62 |
| Interest on debt for the year (per City Auditor)..... | 17,215 00 | 16,155 00 | 15,815 00 | 15,455 00 | 14,987 91 |
| Interest previous years, etc. (net debits, per auditor)..... | 279,148 85 | 279,148 85 | 279,148 85 | 279,148 85 | 279,148 85 |
| Total expenditures ² | <u>\$11,971,128 72</u> | <u>\$12,272,543 62</u> | <u>\$12,582,530 05</u> | <u>\$12,875,033 52</u> | <u>\$13,194,291 38</u> |
| Deduct total receipts paid to collector..... | 6,825,388 27 | 6,931,325 29 | 7,037,238 20 | 7,143,308 81 | 7,238,716 69 |
| Excess of expenditures, capital..... | <u>\$5,145,740 45</u> | <u>\$5,341,218 33</u> | <u>\$5,545,291 85</u> | <u>\$5,731,724 71</u> | <u>\$5,955,574 69</u> |

¹ See footnote 4 under Table 4.² Auditor's figures for total expenditures and receipts are \$60,278.56 more than the above, the difference (capital invested) being the same.

Total Expenditures upon Ferries Since 1858-59.

| | |
|---|------------------------|
| Expenditures for avenues, paving, interest, etc., previous to purchase of the ferries by the city | \$444,101 30 |
| Purchase of ferries, April, 1870 | 276,375 00 |
| Expenditures for ferryboats since April, 1870 | 743,070 58 |
| Expenditures for new buildings, piers, drops, etc. | 607,523 64 |
| Expenditures for tools and fixtures | 14,752 46 |
| Expenditures for land from Lincoln's Wharf in 1887 | 5,562 52 |
| Expenditures for land from Battery Wharf in 1893 | 10,000 00 |
| Total expenditures on capital account | \$2,101,385 50 |
| Expenditures for repairs of all kinds | 1,172,778 26 |
| Expenditures for fuel | 1,712,918 40 |
| Expenditures for salaries and wages | 6,296,070 94 |
| Expenditures for all other purposes | 1,971,416 84 |
| | <hr/> |
| | \$13,254,569 94 |

Total Receipts from Ferries Since 1858-59.

| | |
|--|-----------------------|
| Receipts from rents, etc., previous to purchase of ferries | \$29,588 56 |
| Receipts from ferry tolls since purchase of ferries | 6,998,689 47 |
| Receipts from rents since purchase of ferries | 66,291 89 |
| Receipts from sales of ferryboats | 149,067 44 |
| Receipts from all other sources, per ferry books, | 24,823 04 |
| Receipts from all other sources, additional, per auditor | 30,734 85 |
| Total receipts from all sources | \$7,299,195 25 |
| Less amount with tollmen as capital | 200 00 |
| | <hr/> |
| Total receipts, per auditor's figures | \$7,298,995 25 |

**REGULAR ANNUAL (ORDINARY) AND SPECIAL APPROPRIATIONS
(EXTRAORDINARY) OF THE FERRY SERVICE FOR THE YEAR
ENDING JANUARY 31, 1917.**

| | |
|--|---------------------|
| Appropriation (regular) for the year ending January 31, 1917 | \$298,115 75 |
| Received by transfer from Bridge Service | 5,801 43 |
| | <hr/> |
| | \$303,917 18 |
| | <hr/> |
| Amount of expenditures (regular) for the year | \$303,917 18 |

SPECIAL APPROPRIATIONS.

| | |
|---|---------------------|
| Appropriation authorized and issued May 27, 1902, for ferry improvements | \$100,000 00 |
| Received by transfer December 29, 1916, from special loan to Bridge Service | 112 17 |
| | <u>\$100,112 17</u> |
| Amount expended from May 27, 1902, to January 31, 1916 | \$99,984 40 |
| Amount expended from February 1, 1916, to January 31, 1917 | 127 77 |
| | <u>\$100,112 17</u> |
| Appropriation authorized and issued July 19, 1915, for auxiliary lighting plant | \$2,000 00 |
| Amount expended from July 19, 1915, to January 31, 1917 | 225 00 |
| | <u>\$1,775 00</u> |
| Unexpended balance of appropriation January 31, 1917 | <u>\$1,775 00</u> |

STATEMENT SHOWING RECEIPTS AT EACH FERRY.

North Ferry.

| FROM TOLLMEN. | Foot Passengers. | From Tickets. | Totals. |
|----------------------------|---------------------|------------------|-------------|
| Boston side | \$12,742 47 | \$5,254 00 | \$17,996 47 |
| East Boston side | 12,188 26 | 7,423 00 | 19,611 26 |
| | \$24,930 73 | \$12,677 00 | \$37,607 73 |

| | |
|--|--------------------|
| From tollmen | \$37,607 73 |
| From gatemen: | |
| For 91,420 foot passengers at 1 cent | \$914 20 |
| For cash fares for teams | 10,274 56 |
| | <u>11,188 76</u> |
| Total at North Ferry | <u>\$48,796 49</u> |

South Ferry.

| FROM TOLLMEN. | Foot Passengers. | From Tickets. | Totals. |
|-----------------------|---------------------|--------------------|--------------------|
| Boston side..... | \$9,987 42 | \$5,916 00 | \$15,903 42 |
| East Boston side..... | 9,129 99 | 4,549 00 | 13,678 99 |
| | \$19,117 41 | \$10,465 00 | \$29,582 41 |

From tollmen \$29,582 41

From gatemen:

For 80,713 foot passengers at 1

cent \$807 13

For cash fares for teams 10,927 99

11,735 12

Total at South Ferry **\$41,317 53**

North and South Ferries as above \$90,114 02

Tickets paid for at ferry office 3,228 20

Received in lieu of free ferries July 4, 1916 1 00

Total from rates **\$93,343 22**

Rents for the year 564 00

Sale of old material 594 78

Commissions on public telephone receipts 53 64

Headhouse privileges 500 00

Care of public telephone booths 44 00

Reimbursement for damages 25 50

Total receipts for the year **\$95,125 14**

STATEMENT OF TRAVEL ON THE FERRIES FROM FEBRUARY 1,
1916, TO JANUARY 31, 1917, INCLUSIVE.

| | North Ferry | South Ferry |
|--|-------------------------|-------------------------|
| Foot passengers at 1 cent each | 2,584,493 | 1,992,454 |
| Foot passengers by tickets | 36,776 | 17,521 |
| Foot passengers free | 1,763 | |
| Total foot | <u>2,623,032</u> | <u>2,009,975</u> |

| | North Ferry. | South Ferry. |
|---|-----------------|------------------|
| One-horse teams and pleasure car- riages | 286,299 | 252,811 |
| One-seat automobiles | 19,812 | 23,897 |
| Two-horse teams | 97,205 | 86,438 |
| Motor trucks | 57,678 | 50,474 |
| Three-horse teams | 2,544 | 2,179 |
| Four-horse teams | 2,758 | 3,882 |
| Two-horse pleasure carriages and hacks | 7,128 | 1,368 |
| Two-seat automobiles | 46,628 | 39,209 |
| Handcarts, etc. | 1,411 | 2,126 |
| Dragwheels | 1 | |
| Free teams | 7,808 | 4,259 |
| | <u>529,272</u> | <u>466,643</u> |
| Total paying foot | | 4,631,244 |
| Total free foot passengers | | 1,763 |
| Total foot passengers carried | | <u>4,633,007</u> |
| Total paying teams | | 983,848 |
| Total free teams | | 12,067 |
| Total teams carried | | <u>995,915</u> |

**TOTAL TRAVEL ON BOTH FERRIES FROM FEBRUARY 1, 1911, TO
JANUARY 31, 1917.**

| | 1911-12. | 1912-13. | 1913-14. | 1914-15. | 1915-16. | 1916-17. |
|---------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| One-horse teams..... | 635,792 | 658,255 | 651,701 | 623,508 | 644,311 | 582,819 |
| Two-horse teams..... | 236,600 | 249,052 | 239,121 | 248,464 | 276,850 | 291,795 |
| Three-horse teams..... | 10,357 | 9,897 | 7,732 | 6,125 | 5,410 | 4,723 |
| Four-horse teams..... | 7,218 | 5,838 | 4,578 | 4,739 | 4,507 | 6,640 |
| Two-horse carriages, hacks..... | 51,637 | 67,094 | 63,860 | 83,253 | 84,389 | 94,333 |
| Two-cent tolls..... | 4,329 | 5,519 | 2,662 | 2,231 | 3,195 | 3,637 |
| Dragwheels, etc..... | 11 | 6 | 1 | 4 | 4 | 1 |
| Paid teams at both ferries..... | 945,944 | 995,461 | 969,655 | 968,324 | 1,018,666 | 983,848 |
| Free teams at both ferries..... | 8,134 | 14,541 | 12,954 | 11,028 | 10,844 | 12,067 |
| Total teams at both ferries... | 954,078 | 1,010,002 | 982,609 | 979,352 | 1,029,510 | 995,915 |
| Foot passengers, paid..... | 6,007,367 | 5,950,153 | 6,044,507 | 6,024,082 | 5,878,118 | 4,631,244 |
| Foot passengers, free..... | 3,554 | 2,551 | 2,509 | 885 | 2,053 | 1,763 |
| Total foot passengers..... | 6,010,921 | 5,952,704 | 6,047,016 | 6,024,967 | 5,878,171 | 4,633,007 |

Note: The above team travel includes automobiles.

APPENDIX C.

REPORT OF THE DIVISION ENGINEER OF THE
HIGHWAY DIVISION.

BOSTON, February 1, 1917.

MR. E. F. MURPHY,

Commissioner of Public Works:

DEAR SIR,—I submit herewith a statement of the expenditures, operations and activities of the Highway Division for the year ending January 31, 1917.

The expenditures (maintenance) of the Highway Division for the year were as follows:

| | |
|--|-----------------------|
| Lighting Service | \$772,769 97 |
| Paving Service | 983,910 24 |
| Sanitary Service | 969,438 86 |
| Street Cleaning and Oiling Service | 672,160 84 |
| Sewer Service | 322,199 03 |
| Water Service | 917,823 64 |
| Total | <u>\$4,638,302 58</u> |

NOTE.— For further detail of expenses see pages 12 to 15.

A few of the most important achievements and plans for work of the different services of this division are described below:

LIGHTING SERVICE.

Numerous requests for lamps of the boulevard type have been received from merchants in the retail sections of the city.

While the cost of installing and maintaining these lights is more expensive than the ordinary tungsten lamps, it is felt that the increased cost is more than offset by the increased business in the sections supplied with this type of lamp.

The arbitration of the electric light contract is still under consideration by the Corporation Counsel.

PAVING SERVICE.

The adoption of different types of paving for streets has resulted in contracts being made in groups with a number of streets included in one contract for a particular type. The contracts made include, approximately, 70,000 square yards of granite blocks on a concrete base, with grout joints; 110,000 square yards of asphalt on concrete base; 10,600 square yards wood block on concrete base; 12,500 square yards asphalt on existing macadam base; 31,800 square yards bituminous macadam; 4,300 square yards brick block on concrete base and 35,000 square yards asphalt patching.

The Board of Street Commissioners laid out sixty-nine streets during the year, the construction of which will not be completed until next year. The majority of these streets being in the suburban residential section will be constructed with bituminous pavement or Portland cement concrete.

Four radial highways, viz., Norfolk avenue, Belgrade avenue, Chelsea street and Hyde Park avenue, which have been ordered widened by the Board of Street Commissioners, will not be completed before 1918.

The requests for artificial stone sidewalks have become almost insistent and there are on file in this office at the present time applications for this kind of walk aggregating \$275,000. It is expected that at least \$100,000 will be appropriated early in 1917 for this work.

SANITARY SERVICE.

A substantial saving in the cost of hired teams has been made by the opening of the Ward street station. To put the station in perfect condition for the handling and relaying of refuse will require changes in the bins as now constructed.

STREET CLEANING SERVICE.

In the report for last year reference was made to the need of up-to-date motor equipment for sweeping, pick-up and street flushing. No purchases have been made of new equipment because nothing has been seen in operation working so successfully as to warrant the

expenditure of a sum of money for equipment, the use of which for the time being, at least, would be purely experimental.

Considerable flushing has been done during the year with both horse-drawn and motor-pressure carts hired by the day.

During the year about 950,000 gallons of oil were used for dust-laying purposes.

SEWER SERVICE.

The D street overflow and the B and Seventh streets overflow were extended into Fort Point channel. Old wooden sewers in Albany street, from Kneeland street to Northampton street, Canal street, Sudbury street and other streets were replaced with new pipe sewers.

Extensive improvements have been made at the pumping station, Calf Pasture. A thorough overhauling of all the auxiliaries in the steam plant has been made and the deposit sewers have been cleaned out.

Seventy-three contracts have been made for pipe sewers and drains in 112 streets in all sections of the city to replace old sewers and in new streets which have been opened to travel.

WATER SERVICE.

This service had an unusual busy year laying mains, installing hydrants, services and meters.

There are now 864 miles of water mains and 9,528 hydrants in service.

The replacing of small size mains with the larger sizes, 8 inches and 12 inches, still continues and furnishes an improved service over the smaller sizes of pipe formerly in use. On account of the activities of the Fire Department officials much work has been done in connection with the installation of fire sprinkler pipes.

A condensed statement of the appropriations, revenues and expenditures of the various services of this division will be found on pages 12 to 15.

In the following pages will be found data showing work done and the cost of the same.

Respectfully submitted,

JAMES H. SULLIVAN,
Division Engineer.

HIGHWAY DIVISION — LIGHTING SERVICE.

FINANCIAL STATEMENT.

*Expenditures, February 1, 1916, to January 31, 1917.**Electric Lighting:**Arc.*

| | | |
|--|--------------|--------------|
| Edison Electric Illuminating Company | \$421,527 33 | |
| Charlestown Gas and Electric Company | 25,312 05 | |
| | <hr/> | \$446,839 38 |

Incandescent.

| | | |
|--|-------------|-----------|
| Edison Electric Illuminating Company | \$81,887 35 | |
| Charlestown Gas and Electric Company | 21 12 | |
| | <hr/> | 81,908 47 |

Gas Lighting:

| | | |
|--|--------------|------------|
| Boston Consolidated Gas Company | \$196,865 42 | |
| Charlestown Gas and Electric Company | 11,110 92 | |
| | <hr/> | 207,976 34 |

Salaries and Wages:

| | | |
|---------------------------------------|----------|----------|
| Division Engineer (part of) | \$832 00 | |
| Supervisor | 110 00 | |
| Lamplighter and repairer | 941 50 | |
| Clerk | 1,495 52 | |
| Stenographer | 996 84 | |
| Pensions | 360 00 | |
| | <hr/> | 4,735 86 |

Automobile Expenses:

| | | |
|---|----------|----------|
| Gasolene, oil, etc. | \$110 68 | |
| Tubes and shoes, new and repairs, | 161 47 | |
| Supplies | 34 18 | |
| Repairs | 345 42 | |
| Wages of chauffeur | 1,092 00 | |
| | <hr/> | 1,743 75 |

Construction:

| | | |
|---|------------|--------------|
| Changes on account of installation of lamps | \$1,502 69 | |
| Shifting poles, etc. | 478 62 | |
| | <hr/> | |
| Carried forward | \$1,981 31 | \$743,203 80 |

PUBLIC WORKS DEPARTMENT.

143

| | | |
|---|------------|---------------------|
| <i>Brought forward</i> | \$1,981 31 | \$743,203 80 |
| Broken lamps | 75 | |
| Installing 12 boulevard lamps | 440 00 | |
| | | 2,422 06 |
| <i>Office Expense:</i> | | |
| Printing | \$48 44 | |
| Postage | 20 00 | |
| Stationery and periodicals | 25 50 | |
| | | 93 94 |
| <i>Miscellaneous:</i> | | |
| Traveling expenses | \$15 75 | |
| Telephone rentals, etc. | 58 | |
| Atlas | 36 50 | |
| Stenographer's reports of public hearings | 2,157 27 | |
| Services of experts on investigation of contracts | 24,449 07 | |
| Services of employees of Paving Service on locations of posts | 390 00 | |
| Teaming lamp-post | 1 00 | |
| | | 27,050 17 |
| Total | | <u>\$772,769 97</u> |

Revenue Credited to General Revenue.

Lighting Boston and Cambridge Bridges \$2,531 35

The following is a statement of the work done during the year under the supervision of the Division Engineer, Highway Division:

Arc lamps have been provided for skating and tobogganing during the season at Franklin Field, Franklin Park and Wood Island Park, the same as in years past.

Thirty-two magnetite arc lamps of the Boulevard type, "Whiteway," have been installed on Canal street, city proper and City square, Charlestown.

The usual amount of regulation and relocation of lamps and services, made necessary by street construction, the building of sewers and other works, has been conducted throughout the year.

Petitions and requests for new lamps received from citizens and from officials, also complaints in relation to the Lighting Service, have been investigated and attended to. All streets in the underground district prescribed for the year 1916 have been inspected and necessary changes and additions have been made.

The number of miles of streets and ways lighted by this service is as follows:

| | Miles. |
|---|---------------|
| Public streets and alleys | 596.19 |
| Public footways | 1.28 |
| Park roads, footways and private streets and alleys, approximately | 300.00 |
| | <u>897.47</u> |

During the year the following defects were reported by the police: Arc lamps 5,856; incandescent, 918, and gas lamps, 840.

LAMPS INSTALLED.

| | | |
|-----------------------------------|----|-----|
| Magnetite arc lamps | 53 | |
| Tungsten lamps | 95 | |
| Single mantle gas lamps | 53 | |
| Fire alarm, gas | 1 | |
| | — | 202 |

LAMPS DISCONTINUED.

| | | |
|-----------------------------------|----|------------|
| Magnetite arc lamps | 14 | |
| Flame arc lamps | 0 | |
| Tungsten lamps | 18 | |
| Single-mantle gas lamps | 46 | |
| Double-mantle gas lamp | 0 | |
| Three-mantle gas lamps | 1 | |
| | — | 79 |
| | | <u>123</u> |
| Net increases | | <u>123</u> |

The following table shows the number of lamps of the various types in use on January 1, 1917, as compared with the number in use on January 1, 1916:

| | January, 1917. | January, 1916. | Increase or Decrease. |
|----------------------------|-------------------|-------------------|--------------------------|
| Single mantle gas..... | 9,656 | 9,652 | +4 |
| Double mantle..... | 70 | 70 | ..... |
| Fire Alarm gas..... | 146 | 146 | ..... |
| Magnetite arc..... | 5,099 | 5,059 | +40 |
| Flame arc..... | 23 | 23 | ..... |
| Tungsten incandescent..... | 4,457 | 4,378 | +79 |
| | 19,451 | 19,328 | 123 |

STREET LAMP OUTAGES.

Rebates for lamps not lighted on schedule time or out before the proper time have been received on the various monthly bills, as follows:

| DATE. | Incandescent. | Gas. | Arc. |
|---------------------|---------------|---------|------------|
| February, 1916..... | \$5 32 | \$6 33 | \$325 95 |
| March..... | 5 70 | 7 21 | 185 23 |
| April..... | 3 42 | 18 61 | 135 29 |
| May..... | 2 86 | 35 63 | 111 68 |
| June..... | 2 76 | 2 74 | 83 74 |
| July..... | 3 52 | 1 77 | 67 15 |
| August..... | 2 36 | 95 | 35 96 |
| September..... | 3 16 | 3 26 | 167 77 |
| October..... | 3 87 | 1 88 | 59 31 |
| November..... | 3 16 | 2 77 | 70 18 |
| December..... | 5 72 | 7 96 | 60 49 |
| January, 1917..... | 5 54 | 5 58 | 94 92 |
| | \$47 39 | \$93 69 | \$1,397 67 |

GAS LIGHTING.

There are in use 9,659 single mantle gas lamps, 70 double mantle lamps and 146 open flame fire alarm signal lamps.

The city furnishes the lamp-posts. The gas companies set the lamp-posts and provide service pipes laid from the gas mains to the top of the posts; maintain all such pipes and posts in good condition and repair; furnish gas, lanterns, burners and all other necessary equipment, including labor for lighting and care.

The Lighting Service provides for the gas, lighting and care of the fire alarm signal lamps, and the Fire Department for the lanterns, posts, setting and repairing of same.

Gas Lamps.

| Lighting Company. | Gas District. | Number of Lamps. | Type of Lamps. | Rated Candle Power. | Gas Consumed per Lamp per Hour. | Hours of Burning per Annum. | Cost of Gas per Lamp per Annum. | Cost per Lamp for Lighting, Care and Repair per Annum. | Total Cost per Lamp. |
|---------------------------------------|--|------------------|----------------|---------------------|---------------------------------|-----------------------------|---------------------------------|--|----------------------|
| Boston Consolidated Gas Company. | City proper, East and South Boston, Dorchester, Roxbury, West Roxbury, Brighton. | 9,147 | Single mantle. | 60 | 3 feet. | 4,000 | \$9 00 | \$12 00 | \$21 00 |
| | | 70 | Double mantle. | 100 | 6 feet. | 4,000 | 18 00 | 15 00 | 33 00 |
| | | 127 | Open flame. | ..... | 4 feet. | 4,000 | ..... | ..... | 21 00 |
| | | 509 | Single mantle. | 60 | 3 feet. | 4,000 | 9 00 | ..... | 21 00 |
| Charlestown Gas and Electric Company. | Charlestown..... | 19 | Open flame. | ..... | 4 feet. | 4,000 | ..... | ..... | 21 00 |

ELECTRIC LIGHTING.

There are in use 5,099 magnetite arc lamps, 23 flame arc lamps, 3,177 40-candle power, 1,264 60-candle power, 10 80-candle power, 4 100-candle power, and 6 320-candle power tungsten lamps.

The electric companies provide and set the lamp-posts, except the lamp-posts for incandescent lamps supplied from underground circuits, furnish lamps, overhead wires, underground conduits, cables and connections and all other necessary equipment and maintain them in good condition and repair.

The lighting rates for electric lamps are in accordance with the following table:

| DESCRIPTION OF LAMP. | Fixed Costs per Lamp per Year. | Running Costs per Lamp Hour. |
|---|--------------------------------------|---------------------------------------|
| 40 candle power incandescent lamp..... | \$10 80 | . ¹¹ / ₁₆ cent |
| 60 candle power incandescent lamp..... | 12 00 | . ¹ / ₈ cent |
| 80 candle power incandescent lamp..... | 14 90 | . ¹ / ₈ cent |
| 100 candle power incandescent lamp..... | 18 00 | . ¹ / ₈ cent |
| 320 candle power incandescent lamp..... | 36 00 | 1. ¹ / ₁₆ cents |
| 800 candle power magnetite 500-watt D. C..... | 36 00 | 1. ¹ / ₁₆ cents |
| 1,600 candle power Thoran 500-watt D. C..... | 42 00 | 3. ¹ / ₁₆ cents |

A discount of 10 per cent is made on the above rates for lamps in all sections of the city. A deduction at the rate of 1 cent per hour for lamps of 100 candle power or less and 5 cents per hour for all other lamps is made for outages.

Arc Lamps.

| COMPANY. | Number of Lamps. | Connected. | Type of Lamp. | Type of Circuit. | At Terminal. | Lighting Hours. | Cost per Lamp per Annum. |
|---|------------------|--------------|---------------|-----------------------|--------------|-----------------|--------------------------|
| Edison Electric Illuminating Company..... | 1,905 | Overhead. | Magnetite. | Series 6.6 amp. D. C. | 528 | 3,828 | \$87 52 |
| | 2,873 | Underground. | Magnetite. | Series 6.6 amp. D. C. | 528 | 3,828 | 87 52 |
| | 29 | Underground. | Magnetite. | Multiple D. C. | ..... | 3,828 | 87 52 |
| | 23 | Underground. | Flame. | Series 6.6 amp. D. C. | 528 | 3,828 | 148 05 |
| | 216 | Overhead. | Magnetite. | Series 6.6 amp. D. C. | 528 | 3,828 | 87 52 |
| Charlestown Gas and Electric Company..... | 76 | Underground. | Magnetite. | Series 6.6 amp. D. C. | 528 | 3,828 | 87 52 |
| | 5,122 | | | | | | |

NOTE.— In the above the candle power figures are the official designations. The wattage figures are here eliminated.

Incandescent Lamps.

| COMPANY. | Number of Lamps. | Type of Lamp. | Type of Circuit. | Candle Power. | Lighting Hours. | Cost of Lamp per Annum. |
|---|------------------------|------------------|-----------------------|------------------|--------------------|-------------------------------|
| Edison Electric Illuminating Company..... | 1,741 | Tungsten. | Series 6.6 amp. D. C. | 40 | 3,828 | \$18 33 |
| | 874 | Tungsten. | Series 6.6 amp. D. C. | 60 | 3,828 | 21 14 |
| | 1 | Tungsten. | Series 6.6 amp. D. C. | 80 | 3,828 | 26 38 |
| | 3 | Tungsten. | Series 6.6 amp. D. C. | 100 | 3,828 | 33 43 |
| | 1,436 | Tungsten. | Multiple D. C. | 40 | 3,828 | 18 33 |
| | 390 | Tungsten. | Multiple D. C. | 60 | 3,828 | 21 14 |
| | 9 | Tungsten. | Multiple D. C. | 80 | 3,828 | 26 38 |
| | 6 | Tungsten. | Multiple D. C. | 320 | 3,828 | 84 08 |
| | 1 | Tungsten. | Multiple D. C. | 100 | 3,828 | 33 43 |
| | 1 | Tungsten. | Series 6.6 amp. D. C. | 60 | 3,828 | 21 14 |
| Charlestown Gas and Electric Company..... | | | | | | |

NOTE.— In the above the candle power figures are the official designations. The wattage figures are here eliminated.

HIGHWAY DIVISION. (PAVING SERVICE.)

The following is a description of the most important work done during the year:

GRANITE BLOCK PAVEMENT.

Alexander street, from Bird street to 527 feet northerly, is about 572 feet in length. (See "Assessment Streets.")

Albany street, from Dover street to Northampton street, is about 4,860 feet in length. A contract for paving this street with special granite block, on a six (6) inch Portland cement concrete base, with grout joints, was awarded to Bernard E. Grant August 26, 1916. It is an eighty (80) foot street with a roadway 54 to 60 feet in width. The contractor reset the edgestone and paved the roadway. The sidewalk, which varies from 10 to 13 feet in width, was paved with brick on the easterly side of the street and on the westerly side artificial stone is to be laid. The straight edgestone, flagging and corners were furnished by the city and hauled by the contractor. The circular edgestone and sidewalk brick was furnished by the city on the line of the work. All other materials, including special paving blocks, were furnished by the contractor. About half the work under the contract has been completed and work will be resumed in the spring. The former surface of the street was granite block on a gravel base.

Amory street, from Centre street to Bragdon street, is about 1,408 feet in length. (See "Assessment Streets.")

Batterymarch street, from Franklin street to Broad street, is about 287 feet in length. A contract for paving this street with special granite block, on a six (6) inch Portland cement concrete base, with grout joints, was awarded to Bernard E. Grant August 26, 1916. This street varies in width from 40 to 66 feet, with sidewalks varying from 6 to 8 feet in width. The contractor did the excavating, reset the edgestone, laid the flagging crosswalks, paved the roadway and laid brick sidewalks. The straight edgestone, flagging and corners were furnished by the city and hauled by the contractor. The sidewalk bricks were furnished by the city on the line of the work. All other materials, including the special paving blocks, were furnished by the contractor. The former surface of the street was granite block, gravel base and joints.

Canal street, from Haymarket square to Causeway street, is about 1,125 feet length in length. A contract for paving this street with special granite block, on a six (6) inch Portland cement concrete base, with grout joints, was awarded to Bernard E. Grant August 26, 1916. It is a 74-foot street with a 50-foot roadway and sidewalks varying from 10 to 15 feet in

width. This street was started very late in the fall and only a part of the excavating and a small amount of paving was done. Work will be resumed in the spring. The former surface of this street was granite block, concrete base and pitch joints.

Columbia road, from Edward Everett square to Dudley street, is about 1,460 feet in length. A contract for paving this street with special granite block, on a four (4) inch Portland cement base with grout joints, was awarded to Bernard E. Grant August 26, 1916. The width of this street varies from 36 to 44 feet. The edgestone was reset, flagging crosswalks were relaid, brick sidewalks were relaid and the roadway paved with granite paving blocks. The former surface of this street was telford macadam.

Dorchester avenue, from Savin Hill avenue to Freeport street, is about 1,940 feet in length. A contract for paving this street with granite blocks, on a six (6) inch Portland cement concrete base, was awarded to Bernard E. Grant August 26, 1916. It is a 60-foot street with 10-foot sidewalks. The work done this year consisted of paving the area between the tracks. The present surface of this street is granite block on gravel base. Work will be resumed in the spring.

School street, from Washington street to Tremont street, is about 570 feet in length. A contract for paving this street with special granite block, on a six (6) inch Portland cement concrete base, grout joints, was awarded to Bernard E. Grant August 26, 1916. The width of this street varies from 35 to 43 feet. The contractor reset the edgestone, laid the flagging crosswalks and paved the street. The former surface of this street was granite block on concrete base.

Washington street, from Morton street to Asticou road. (See "Assessment Streets.")

Albany street, from Kneeland street to the railroad. (Not started.)

Beach street, from Harrison avenue to Atlantic avenue. (Not started.)

Clinton street, from Merchants row to Commercial street. (Not started.)

Cross street, from Commercial street to Haymarket square. (Not started.)

Fulton street, from Blackstone street to Richmond street. (Not started.)

Harrison avenue, from Kneeland street to Dover street. (Not started.)

Haymarket square. (Not started.)

Lincoln street, from Essex street to Beach street. (Not started.)

McKinley square. (Not started.)

Mercantile street, from South Market street to Richmond street. (Not started.)

Washington street, from Haymarket square to Elm street. (Not started.)

HASSAM BLOCK PAVEMENT.

Condor street, from Glendon street to East Eagle street, is about 813 feet in length. (See "Assessment Streets.")

Public alley No. 903, from Haviland street to Public alley 904, is about 426 feet in length. (See "Assessment Streets.")

Public alley No. 904, from Bickerstaff street to Public alley 903, is about 99 feet in length. (See "Assessment Streets.")

Sturtevant street, from Park street to across Gibson street, is about 567 feet in length. (See "Assessment Streets.")

ASPHALT PAVEMENT.

Appleton street, from Berkeley street to Columbus avenue, is about 1,400 feet in length. A contract for constructing this street was awarded to Warren Brothers Company September 9, 1916. Work was begun September 20, 1916, and completed November 16, 1916. It is a 55-foot street with a 35-foot roadway paved with Acme asphalt and Bessemer brick gutters. The asphalt was laid on the old macadam. The brick gutters, which are 30 inches wide, were laid on a 6-inch Portland cement concrete base. The bricks were furnished by the contractor. The granite block paving at the intersection of Dartmouth street was repaved. The sidewalks, which are 10 feet in width, were laid with brick. The city furnished the brick on the line of the work. The brick block gutters and asphalt pavement were laid under a five-year maintenance guaranty. The former surface of this street was macadam.

Ardent street, from Belgrade avenue to Colberg avenue, is about 301 feet in length. (See "Assessment Streets.")

Bardwell street, from South street to Ballard street, is about 613 feet in length. (See "Assessment Streets.")

Brunswick street, from Blue Hill avenue to Normandy street, is about 639 feet in length. (See "Assessment Streets.")

Cedric street, from Magazine street to Langdon street, is about 616 feet in length. (See "Assessment Streets.")

Centervale park, from Upland avenue to Bournside street, is about 517 feet in length. (See "Assessment Streets.")

Chandler street, from Berkeley street to Columbus avenue, is about 1,105 feet in length. A contract for constructing the surface of this street was awarded to Warren Brothers Company September 9, 1916. Work was begun September 20, 1916, and completed November 1, 1916. It is a 55-foot street with a 35-foot roadway paved with Acme asphalt on macadam base and Bessemer brick gutters on a 6-inch concrete base. The edgestone was reset, flagging crosswalks relaid and the sidewalks 10 feet in width were paved with brick. The circular edgestone and sidewalk brick were furnished by the city on the line of the work. All other materials were furnished by the city. The

Bessemer brick gutters and asphalt pavement were laid under a five-year maintenance guaranty. The former surface of the street was macadam.

Dearborn street, from Albany street to Dudley street, is about 495 feet in length. A contract for constructing the surface of this street was awarded to Warren Brothers Company September 9, 1916. Work was begun November 21, 1916, and suspended December 22, 1916. It is a 46-foot street, with a 27-foot roadway paved with Acme asphalt on a 6-inch Portland cement concrete base. The roadway was partly completed. The contractor reset the edgestone and flagging crosswalks. The contractor furnished all material necessary to do the work. The former surface of this street was granite block. This work will be resumed in the spring.

Dunlap street, from Washington street to Whitfield street, is about 804 feet in length. (See "Assessment Streets.")

Dunster road, from Centre street to Pond street, is about 1,770 feet in length. (See "Assessment Streets.")

Epping street, from Washington street to Norfolk street, is about 241 feet in length. (See "Assessment Streets.")

Eric avenue, from Savin Hill avenue to 344 feet northerly, is about 344 feet in length. (See "Assessment Streets.")

Everton street, from Geneva avenue to Olney street, is about 690 feet in length. (See "Assessment Streets.")

Fernboro street, from Lawrence avenue to Intervale street, is about 500 feet in length. (See "Assessment Streets.")

Gaffney street, from Commonwealth avenue to Boston & Albany Railroad, is about 822 feet in length. (See "Assessment Streets.")

Glendower road, from Kittredge street to Poplar street, is about 1,925 feet in length. (See "Assessment Streets.")

Harwood street, from Willowood street to Lucerne street, is about 725 feet in length. (See "Assessment Streets.")

Hillcrest street, from Elgin street to Temple street, is about 525 feet in length. (See "Assessment Streets.")

Homestead street, from Humboldt avenue to Elm Hill avenue, is about 1,125 feet in length. (See "Assessment Streets.")

Hubert street, from Shawmut avenue to Westminster street, is about 450 feet in length. (See "Assessment Streets.")

Jones avenue, from Mascot street to Ballou avenue, is about 993 feet in length. (See "Assessment Streets.")

Lithgow street, from Talbot avenue to Wainwright street, is about 683 feet in length. (See "Assessment Streets.")

Normandy street, from northerly side of Intervale street to Devon street, is about 490 feet in length. (See "Assessment Streets.")

Orchardfield street, from Dorchester avenue to Freeport street, is about 814 feet in length. (See "Assessment Streets.")

Parkman street, from North Grove street across North Anderson street, is about 195 feet in length. A contract for

constructing the surface of this street was awarded to Warren Brothers Company September 9, 1916. Work was begun November 13, 1916, and suspended November 28, 1916. This street varies in width from 32 to 33 feet, with a roadway 20 to 21 feet wide paved with Acme asphalt on a 6-inch Portland cement concrete base, with brick gutters $2\frac{1}{2}$ feet wide. The contractor did the excavating, reset the edgestone and is to construct artificial stone sidewalks in the spring. The asphalt and brick gutters were laid under a five-year maintenance guaranty. The contractor furnished all materials to do the work. The former surface of the street was asphalt. Work will be resumed in the spring.

Randall street, from Albany street to Harrison avenue, is about 636 feet in length. (See "Assessment Street.")

Ripley road, from Harvard street to Vassar street, is about 685 feet in length. (See "Assessment Streets.")

Rosewood street, from Oakland street to Randolph road, is about 1,529 feet in length. (See "Assessment Streets.")

Temple street, from Spring street to Ivory street, is about 1,091 feet in length. (See "Assessment Streets.")

Theodore street, from Morton street to about 618 feet easterly, is about 624 feet in length. (See "Assessment Streets.")

Trent street, from Coleman street to Clarkson street, is about 228 feet in length. (See "Assessment Streets.")

Tuckerman street, from Dorchester street to Middle street, is about 375 feet in length. (See "Assessment Streets.")

Upland avenue, from Park street to Melville avenue, is about 748 feet in length. (See "Assessment Streets.")

West Canton street, from Appleton street to Tremont street, is about 900 feet in length. A contract for constructing the surface of this street was awarded to Warren Brothers Company September 9, 1916. Work was begun September 13, 1916, and completed October 25, 1916. This street varies in width from 44 to 45 feet, with a roadway 28 to 29 feet in width paved with Acme asphalt on a macadam base and brick gutters 30 inches wide on a concrete base. The contractor also reset the edgestone, relaid the flagging crosswalks and relaid the brick sidewalks. The intersection at Warren avenue, consisting of about 314 square yards of wood block, was relaid. The city furnished the sidewalk brick on the line of the work. All other materials were furnished by the contractor. The asphalt and brick gutters were laid under a maintenance guaranty. The former surface of the street was macadam.

Westwood street, from Richfield street to Wales place, is about 607 feet in length. (See "Assessment Streets.")

Worthington street, from Longwood avenue to Fenway, is about 1,161 feet in length. (See "Assessment Streets.")

The following streets are under contract for asphalt pavement. Work has not been started on any of them.

Atkins street, from Washington street to Stratton street.

Blake street, from Hyde Park line across Randolph road.

Bexley road, from Washington street to Florence street.

Blossom street, from Allen street to Fruit street.

Cummings road, from Commonwealth avenue to 855 feet easterly.

Fordham road, from Commonwealth avenue to Brighton avenue.

Fruit street, from Charles street to Blossom street.

Glencoe street, from North Beacon street to Garden street.

Halifax street, from South Huntington avenue to Pond View avenue.

Kenton road, from Washington street to 600 feet southeasterly.

Lorne street, from Harvard street to 650 feet northeasterly.

Matchett street, from Washington street to 343 feet northerly.

Moraine street, from South Huntington avenue to Jamaica-way.

North Anderson street, from Parkman street to Fruit street.

North Grove street, from Cambridge street to Fruit street.

Neptune road, from Bennington street to Boston, Revere Beach & Lynn Railroad.

Perham street, from Vermont street to New York, New Haven & Hartford Railroad.

Richwood street, from Centre street to Montview street.

Rugby road, from Randolph road to Oakland street.

Saville street, from Park street to Stratford street.

Selwyn street, from Farquhar street to 1,174 feet northeasterly.

Southwick street, from Neponset avenue to Freeport street.

West Broadway, from Dorchester avenue to E street.

William Jackson avenue, from Chestnut Hill avenue to Academy Hill road.

Wordsworth street, from Horace street to Coleridge street.

WOOD BLOCK PAVEMENT.

Boylston street, from Tremont street to Washington street, is under contract for wood block pavement but no work was done this year.

Devonshire street, from Adams square to Water street, is about 696 feet in length. A contract for repaving the surface of this street was awarded to Bernard E. Grant August 26, 1916. Work was begun November 12, 1916, and completed December 16, 1916. This street varies in width from 43 to 55 feet, with roadway varying from 28 to 39 feet. The roadway was repaved with wood block on a portland cement concrete base, laid under a five-year maintenance guaranty. The contractor relaid the brick sidewalks, which vary in width from 8 to 10 feet. There was some new edgestone furnished and set in the street by the abutters and the existing concrete base was built up to the proper grade for the new wood block pavement. There was no paving work done in or between the car tracks by either the City of Boston or the Boston Elevated Railway. Under the

contract it was the intention to pave the street with granite block, but at the request of the abutters the pavement was changed to wood block.

BITULITHIC PAVEMENT.

Kittredge street, from Cornell street to Beech street, is about 549 feet in length. (See "Assessment Streets.")

Montebello road, from Forest Hills street to Walnut avenue, is about 1,087 feet in length. (See "Assessment Streets.")

ASSESSMENT STREETS.

The following streets have been constructed or are in the process of construction under the provisions of chapter 393 of the Acts of 1906, and acts in amendment or in addition thereto:

Alexander street, from Bird street to 527 feet northerly, is about 527 feet in length. The contract for constructing the surface of this street was awarded to James Doherty June 16, 1916. Work was begun August 8, 1916, and suspended November 2, 1916. It is a 40-foot street with a 26-foot roadway paved with granite block on a 6-inch portland cement concrete base, granite edgestone, flagging crosswalks and artificial stone sidewalks. The straight edgestone and flagging were furnished by the city and hauled by the contractor. The city furnished the circular edgestone on the line of the work. All other materials were furnished by the contractor. The artificial stone sidewalks were laid under a five-year maintenance guaranty.

Ardent street, from Belgrade avenue to Colberg avenue, is about 301 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 18, 1916. Work was begun July 27, 1916, and completed October 11, 1916. It is a 40-foot street with a sheet asphalt pavement, consisting of 1½-inch wearing surface and 1½-inch bituminous binder on a 4-inch Portland cement concrete base, granite edgestone, flagging crosswalks and artificial stone sidewalks, 7 feet in width. The contractor furnished all materials necessary to do the work. The asphalt roadway and artificial stone sidewalks were laid under a five-year maintenance guaranty.

Amory street, from Centre street to Bragdon street, is about 1,408 feet in length. A contract for constructing the surface of this street was awarded to James Doherty August 21, 1916. Work was begun November 6, 1916, and suspended January 20, 1917. It is a 50-foot street with roadway 34 feet wide and 8-foot sidewalks. The contract calls for a granite block roadway and artificial stone sidewalks. The work done this year consisted of rough grading.

Atkins street, from Washington street to Stratton street, is about 618 feet in length. (Work not started.)

Augustus avenue, from Metropolitan avenue, across Ethel

street, is about 387 feet in length. A contract for constructing the surface of this street was awarded to Martino DeMatteo October 14, 1916. Work was begun October 23, 1916, and suspended November 17, 1916. It is a 40-foot street and is to have a bituminous macadam roadway, granite edgestone, flagging crosswalks and artificial stone sidewalks. The straight edgestone was furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The work this year consisted of setting edgestone, placing cinders for artificial stone sidewalks and rough grading the roadway. The work will be resumed as early in the spring as weather conditions will permit.

Bardwell street, from South street to Ballard street, is about 613 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 18, 1916. Work was begun September 11, 1916, and suspended December 15, 1916. This street varies in width from 25 to 31 feet, and is to have a sheet asphalt pavement on a 4-inch Portland cement concrete base, granite edgestone and artificial stone sidewalks from 4 to 5 feet wide. The straight edgestone and corners were furnished by the city and hauled by the contractor. The work done this year consisted of setting edgestone, laying artificial stone sidewalks and concrete base for roadway. The asphalt surface will be laid early in the spring. The artificial stone sidewalks were laid under a five-year maintenance guaranty.

Bexley road, from Washington street to Florence street. (Not started.)

Blake street, from Hyde Park line to Randolph road. (Not started.)

Breck avenue, from Washington street to Langley road. (Not started.)

Brunswick street, from Blue Hill avenue to Normandy street, is about 639 feet in length. The contract for constructing the surface of this street was awarded to the Central Construction Company July 28, 1916. Work was begun August 16, 1916, and completed November 13, 1916. It is a 40-foot street with a 26-foot roadway, consisting of sheet asphalt pavement on a 4-inch Portland cement concrete base, granite edgestone and artificial stone sidewalks, 7 feet in width. The edgestone was set and the roadway graded by the department force. The department force also laid the concrete base. The contractor placed the asphalt top and constructed artificial stone sidewalks. The asphalt and artificial stone was laid under a five-year maintenance guaranty.

Caledonian avenue, from Spring street about 210 feet south-erly. A contract for excavating and grading this street was awarded to Frank Drinkwater November 13, 1916. Work was begun December 9, 1916, and is still going on. This street is 40 feet in width. The work this year consisted in stripping and excavating rock.

Caspian way, from Savin Hill avenue about 520 feet easterly. (Not started.)

Cedric street, from Magazine street to Langdon street, is about 616 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 28, 1916. Work was begun August 3, 1916, and completed November 14, 1916. It is a 30-foot street with a 20-foot sheet asphalt roadway on a 4-inch Portland cement concrete base, granite edgestone and artificial stone sidewalks, 5 feet in width. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The asphalt roadway and artificial stone sidewalks were laid under a five-year maintenance guaranty.

Centervale park, from Upland avenue to Bourneside street, is about 517 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 28, 1916. Work was begun August 10, 1916, and suspended November 27, 1916. It is a 72-foot street with two 19-foot sheet asphalt roadways on a 4-inch concrete base, a 20-foot center loam space, granite edgestone and artificial stone sidewalks with loam spaces. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials necessary to do the work were furnished by the contractor. The asphalt pavement was laid under a five-year maintenance guaranty. The artificial stone sidewalks will be laid in the spring.

Condor street, from Glendon street to East Eagle street, is about 813 feet in length. A contract for constructing the surface of this street was awarded to the Bay State Dredging Company May 22, 1916. Work was begun May 31, 1916, and completed November 11, 1916. It is a 50-foot street, with a 34-foot Hassam block paved roadway on a 6-inch Portland cement Hassam concrete base. The contractor set the edgestone, laid the flagging crosswalks and laid brick sidewalks, 8 feet in width. The contractor built a rubble masonry sea wall on a pile foundation at the end of the street where the old wharf was and also topped out an old sea wall near Glendon street with a granite coping. The contractor also built wooden fences on top of these walls. The straight edgestone, circular edgestone and sidewalk bricks were furnished by the city on the line of the work. All other materials were furnished by the contractor. The former surface of this street was gravel.

Cornell street, from Orange street to Colberg avenue, is about 1,437 feet in length. A contract for constructing the surface of this street was awarded to Martino DeMatteo October 14, 1916. Work was begun December 2, 1916, and suspended December 30, 1916. It is a 40-foot street and is to

have a 6-inch bituminous roadway, granite edgestone, flagging crosswalks and artificial stone sidewalks, 7 feet in width. The work done this year has consisted of rough grading. Work will be resumed as early in the spring as practicable.

Crown path, from Washington street to Claybourne street, is about 221 feet in length. A contract for constructing artificial stone walks, steps and walls was awarded to James Doherty April 25, 1916. Work was begun July 5, 1916, and completed November 4, 1916. It is a 10-foot footway with an artificial stone walk, 8 feet wide, with a buttress and pipe rail fence. All the materials were furnished by the contractor.

Cummings road, from Commonwealth avenue 855 feet easterly. (Not started.)

Downer avenue, from DeWolf street to Sawyer avenue. (Not started.)

Dunlap street, from Washington street to Whitfield street, is about 804 feet in length. This street, with the exception of the asphalt surface and binder and artificial stone sidewalks, was constructed by the Paving Service forces. Work under the contract was begun September 24, 1915, and completed December 16, 1915. It is a 30-foot street with a 20-foot roadway, having a 1½-inch Trinidad asphalt wearing surface, 1½-inch bituminous binder on a 6-inch cement base, part granite edgestone, flagging crosswalks and a 5-foot artificial stone sidewalk. A contract for laying the asphalt roadway and artificial stone sidewalk was awarded to William J. Rafferty & Co. December 30, 1915. Work was begun December 23, 1915, and completed April 29, 1916. The contractor furnished all materials necessary to lay artificial stone sidewalk and asphalt surface and binder. The asphalt and artificial stone sidewalk were laid under a five-year maintenance guaranty.

Dunster road, from Centre street to Pond street, is about 1,770 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 18, 1916. Work was begun September 30, 1916, and suspended December 15, 1916. It is a 40-foot street and is to have a sheet asphalt pavement on a 4-inch Portland cement concrete base, granite edgestone and sidewalks, 7 feet in width, consisting of a 4½-foot artificial stone walk with a loam space. The artificial stone sidewalks were laid under a five-year maintenance guaranty. The work this year consisted of setting edgestone and laying the base for the asphalt pavement. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. Work will be resumed early in the spring.

Epping street, from Washington street to Norfolk street, is about 241 feet in length. The contract for constructing the surface of this street was awarded to the Central Construction

Company July 28, 1916. Work was begun November 13, 1916, and suspended December 15, 1916. It is a 30-foot street with a 20-foot asphalt roadway, granite edgestone and 5-foot artificial stone sidewalks. Only the rough grading and hauling of the edgestone has been done this year. Work will be resumed in the spring.

Eric avenue, from Savin Hill avenue to 344 feet northerly, is about 344 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 28, 1916. Work was begun September 19, 1916, and suspended December 6, 1916. It is a 50-foot street with a 34-foot roadway of sheet asphalt laid on a 4-inch concrete base. The sidewalks, 8 feet in width, are to be of artificial stone. The straight edgestone and corners were furnished by the city and hauled by the contractor. The contractor furnished all other materials necessary to do the work. The asphalt pavement was laid under a five-year maintenance guaranty. The artificial stone sidewalks will be completed in the early spring.

Everton street, from Geneva avenue to Olney street, is about 690 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 28, 1916. Work was begun September 2, 1916, and suspended December 26, 1916. It is a 40-foot street with a 26-foot Topeka roadway on a 4-inch Portland cement concrete base, granite edgestone and artificial stone sidewalks 7 feet in width. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The Topeka pavement was laid under a five-year maintenance guaranty. The artificial stone sidewalks are not finished. The Paving Service force did the rough grading and set most of the edgestone. Work will be resumed early in the spring.

Fernboro street, from Lawrence avenue to Intervale street, is about 500 feet in length. A contract to construct this street was awarded to James Doherty December 3, 1915. Work was begun April 26, 1916, and completed June 28, 1916. The street as constructed is 40 feet in width, with a 26-foot roadway of sheet asphalt on a 6-inch Portland cement concrete base, granite edgestone, flagging crosswalks and artificial stone sidewalks 7 feet wide. The contractor did the excavating, which consisted of considerable rock cutting. The city furnished the straight edgestone, corners and flagging and the contractor hauled the same. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The asphalt pavement and artificial stone sidewalks were laid under a five-year maintenance guaranty.

Fordham road, from Commonwealth avenue to Brighton avenue. (Not started).

Gaffney street, from Commonwealth avenue to Boston & Albany Railroad, is about 822 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company October 9, 1916. Work was begun November 24, 1916, and suspended December 15, 1916. It is an 80-foot street and is to have a sheet asphalt roadway on a 4-inch Portland cement concrete base, brick gutters, granite edgestone and artificial stone sidewalks, one 10 feet and one 20 feet in width. The work this year has consisted of excavating and hauling part of the edgestone. Work will be resumed in the spring.

Glencoe street, from North Beacon street to Garden street. (Not started.)

Glendower road, from Kittredge street to Poplar street, is about 1,925 feet in length. A contract for constructing the surface of this street was awarded to the Charles J. Jacobs Company September 20, 1915. Work was begun October 26, 1915, and suspended December 15, 1915. Work was resumed April 27, 1916, and completed August 12, 1916. It is a 40-foot street with a sheet asphalt pavement on a 6-inch Portland cement concrete base, granite edgestone and artificial stone sidewalks 7 feet in width. The artificial stone sidewalks and asphalt roadway were laid under a five-year maintenance guaranty. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The work this year consisted of constructing about 1,025 feet at the Kittredge street end.

Granada avenue, from Metropolitan avenue to Ethel street, is about 417 feet in length. A contract for constructing the surface of this street was awarded to Martino DeMatteo October 14, 1916. Work was begun November 6, 1916, and suspended December 13, 1916. It is a 40-foot street and is to have a 6-inch bituminous macadam roadway, granite edgestone, flagging crosswalks and artificial stone sidewalks 7 feet in width. The work this year has consisted of setting edgestone, placing cinders for artificial stone sidewalks and rough grading roadway. Work will be resumed early in the spring.

Halifax street, from South Huntington avenue to Pond View avenue. (Not started.)

Harwood street, from Willowood street to Lucerne street, is about 725 feet in length. A contract for constructing the surface of this street was awarded to James Doherty December 3, 1915. Work was begun August 18, 1916, and suspended December 4, 1916. It is a 40-foot street with a 26-foot sheet asphalt roadway on a 6-inch Portland cement concrete base and artificial stone sidewalks 7 feet in width. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The sheet asphalt pavement

was laid under a five-year maintenance guaranty. The artificial stone sidewalks will be completed early in the spring.

Hillcrest street, from Elgin street to Temple street, is about 525 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 18, 1916. Work was begun August 4, 1916, and suspended December 5, 1916. It is a 40-foot street and is to have a sheet asphalt pavement on a 4-inch Portland cement concrete base, granite edgestone and artificial stone sidewalks 7 feet in width. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The work this season has consisted of setting edgestone, laying concrete base and the greater part of the artificial stone sidewalks. The work will be completed early in the spring.

Hill Top street, from Granite avenue to Hallet street, is about 1,990 feet in length. A contract for constructing the surface of this street was awarded to Martino DeMatteo. Work was begun October 25, 1916, and is still going on. It is a 50-foot street and is to have a 34-foot bituminous macadam roadway, granite edgestone, flagging crosswalks and sidewalks 8 feet in width, consisting of artificial stone. The straight edgestone was furnished by the city and hauled by the contractor. The roadway and sidewalks have been rough graded and a part of the edgestone set. A considerable amount of rough grading was done by the Paving Service force in 1915. This street will be completed early in the summer.

Homestead street, from Humboldt avenue to Elm Hill avenue, is about 1,125 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 28, 1916. Work was begun October 11, 1916, and suspended December 15, 1916. When completed it will be a 40-foot street with a 26-foot sheet asphalt roadway on a 4-inch Portland cement concrete base, granite edgestone and artificial stone sidewalks 7 feet in width. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The work done this year consisted of setting edgestone and rough grading the street.

Hubert street, from Shawmut avenue to Westminster street, is about 450 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 28, 1916. Work was begun August 16, 1916, and suspended November 12, 1916. It is a 44-foot street with a 26-foot roadway of sheet asphalt laid on a 4-inch Portland cement concrete base, granite edgestone and artificial stone sidewalk 7 feet in width. The artificial stone sidewalks and roadway were laid under a five-year maintenance guaranty. The straight edgestone was furnished by the city and hauled

by the contractor. The circular edgestone was furnished by the city on the line of the work. The contractor furnished all other materials necessary to do the work. This street is practically completed with the exception of removing two trees. This work will be done early in the spring.

Jones avenue, from Mascot street to Ballou avenue, is about 993 feet in length. The contract for constructing the surface of this street was awarded to James Doherty November 3, 1915. Work was begun November 9, 1915, and suspended December 4, 1915. Work was resumed April 21, 1916, and completed June 13, 1916. It is a 40-foot street with a 26-foot asphalt roadway on a 6-inch Portland cement concrete base granite edgestone, flagging crosswalks and artificial stone sidewalks 7 feet in width. The filling and grading was done in 1915. All other work was completed this year. The straight edgestone, corners and paving blocks were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The artificial stone sidewalks and asphalt roadway were laid under a five-year maintenance guaranty.

Kenton road, from Washington street 600 feet southeasterly. (Not started.)

Kittredge street, from Cornell street to Beech street, is about 549 feet in length. A contract for constructing the surface of this street was awarded to the Charles J. Jacobs Company November 29, 1915. Work was begun April 10, 1916, and completed July 6, 1916. It is a 40-foot street with a bitulithic pavement laid on a 6-inch Portland cement concrete base, granite edgestone and artificial stone sidewalks 7 feet in width. The artificial stone sidewalks and roadway were laid under a five-year maintenance guaranty. The straight edgestone, flagging and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials necessary to do the work were furnished by the contractor.

Langley road, from Breck avenue 571 feet easterly. (Not started.)

Lithgow street, from Talbot avenue to Wainwright street, is about 683 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 28, 1916. Work was begun October 31, 1916, and suspended December 15, 1916. It is a 40-foot street with a 26-foot roadway. This street when constructed will have a sheet asphalt roadway and artificial stone sidewalks 7 feet in width. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The work done this year consisted of setting the edgestone and grading part of the sidewalks. Work will be resumed early in the spring.

Lucas street, from Shawmut avenue to Washington street, is about 342 feet in length. This street was completed with the exception of the artificial stone sidewalks in 1915. A contract for constructing artificial stone sidewalks was awarded to John Kelly Company. Work was begun July 24, 1916, and completed July 26, 1916. This sidewalk was laid under a five-year maintenance guaranty.

Lorette street, from Centre street to Hillcrest street, is about 504 feet in length. A contract for constructing the surface of this street was awarded the Central Construction Company July 18, 1916. Work was begun August 1, 1916, and suspended October 27, 1916. It is a 40-foot street with a sheet asphalt pavement on a 4-inch Portland cement concrete base, granite edgestone and artificial stone sidewalks 7 feet in width. The artificial stone sidewalks and roadway were laid under a five-year maintenance guaranty. The straight edgestone, paving blocks and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The contractor furnished all other materials necessary to do the work. This street is practically completed with the exception of a small amount of work at the Hillcrest street end. Work will be resumed early in the spring.

Lorne street, from Harvard street 650 feet northeasterly. (Not started.)

Matchett street, from Washington street 343 feet northerly. (Not started.)

Magnolia square, from Magnolia street, Dorchester. A contract for constructing artificial stone sidewalks in this square was awarded to the John Kelly Company November 9, 1915. Work was begun July 20, 1916, and completed July 22, 1916. The artificial stone sidewalks in this square were laid under a five-year maintenance guaranty.

Moraine street, from South Huntington avenue to Jamaica-way. (Not started.)

Morton street, from Norfolk street to the easterly line of the Midland Division, New York, New Haven & Hartford Railroad, is about 466 feet in length. It is an 80-foot street with a 56-foot bituminous macadam roadway, 12-foot sidewalks, full width artificial stone on the northerly side and on the southerly side in front of the Brewster School. The remainder of the sidewalk from the school to the railroad bridge is gravel. The grading, construction of the roadway and setting of the edgestone was done by the Paving Service forces. This work is nearly completed with the exception of the approach at the easterly end. A contract to furnish filling for this street was awarded to William J. Barry September 12, 1916. Work was begun September 4, 1916, and is nearly completed. Work will be completed early in the spring. A contract for constructing artificial stone sidewalks in this street was awarded to William J. Rafferty October 9, 1916. Work was begun October 19, 1916,

and completed December 1, 1916. The sidewalks were laid under a five-year maintenance guaranty.

Montebello road, from Forest Hills street to Walnut avenue, is about 1,087 feet in length. A contract for constructing the surface of this street was awarded to Martino DeMatteo September 29, 1915. Work was resumed May 8, 1916, and completed July 28, 1916. It is a 40-foot street with a 2-inch bitulithic pavement on a 6-inch concrete base, granite edgestone, flagging crosswalks and sidewalks 7 and 7.8 feet in width, consisting of 4½-foot artificial stone sidewalks with a loam space. The roadway and artificial stone sidewalks were laid under a five-year maintenance guaranty. The straight edgestone, flagging, paving blocks and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. With the exception of setting a part of the edgestone the street is practically completed.

Neptune road, from Bennington street to Boston, Revere Beach & Lynn Railroad. (Not started.)

Normandy street, from northerly side of Intervale street to Devon street, is about 490 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 28, 1916. Work was begun September 1, 1916, and completed November 13, 1916. It is a 40-foot street with a 26-foot roadway of sheet asphalt on a Portland cement concrete base, granite edgestone, flagging crosswalks and artificial stone sidewalks 7 feet in width. The asphalt roadway and artificial stone sidewalks were laid under a five-year maintenance guaranty. The contractor furnished all material necessary to lay the asphalt roadway and artificial stone walks. All other work on this street was done by the Paving Service force.

Orchardfield street, from Dorchester avenue to Freeport street, is about 814 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company. Work was begun October 10, 1916, and suspended December 8, 1916. It is a 20-foot street with a 14-foot sheet asphalt roadway on a 4-inch cement concrete base, granite edgestone and artificial stone sidewalks 3 feet in width. The asphalt roadway was laid under a five-year maintenance guaranty. The straight edgestone and corners were furnished by the city and hauled by the contractor. The city furnished the circular edgestone on the line of the work. All other materials were furnished by the contractor. This street is finished with the exception of the artificial stone sidewalks, which will be completed early in the spring.

Patten street, from Hyde Park avenue to Bourne street. (Not started.)

Perham street, from Vermont street to New York, New Haven & Hartford Railroad. (Not started.)

Public alley No. 903, from Haviland street to Public alley No. 904, is about 426 feet in length. A contract for constructing the surface of this alley was awarded to James Doherty November 24, 1915. Work was begun April 11, 1916, and completed June 23, 1916. This alley as constructed is 10 feet wide with an 8-foot roadway and 1-foot sidewalks. The contractor furnished and laid a Hassam block pavement on a 6-inch Hassam block base, set the edgestone, relaid the crosswalks and placed a concrete backing between the back of the edgestone and the street line with the top finished as an artificial stone sidewalk. The straight edgestone and corners were furnished by the city and hauled by the contractor. The city furnished the special cut edgestone and circular edgestone on the line of the work. All other materials were furnished by the contractor.

Public alley No. 904, from Bickerstaff street to Public alley No. 903, is about 99 feet in length. A contract to construct the surface of this alley was awarded to James Doherty November 24, 1915. Work was begun April 11, 1916, and completed June 23, 1916. This alley as constructed is 10 feet wide with an 8-foot roadway and 1-foot sidewalks. The contractor furnished and laid a Hassam block pavement on a 6-inch Hassam block base, set the edgestone, relaid the crosswalks and placed a concrete backing between the back of the edgestone and the street line, with the top finished as an artificial stone sidewalk. The straight edgestone and corners were furnished by the city and hauled by the contractor. The city furnished the special edgestone and circular edgestone on the line of the work. All other material was furnished by the contractor.

Ralston street, from Dorchester avenue to Old Colony avenue, is about 1,174 feet in length. A contract for furnishing filling in this street was awarded to Frank J. Hannon January 2, 1917. Work was begun January 2, 1917, and will be completed early in the spring.

Randall street, from Albany street to Harrison avenue, is about 636 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 28, 1916. Work was begun August 4, 1916, and completed October 21, 1916. This street varies in width from 30 to 38 feet, with an asphalt roadway 20 to 22 feet in width, granite edgestone, flagging crosswalks and artificial stone sidewalks 5 to 6 feet in width. The asphalt roadway and artificial stone sidewalks were laid under a five-year maintenance guaranty. The Paving Service forces set the edgestone and laid the concrete base.

Richwood street, from Centre street to Montview street. (Not started.)

Ripley road, from Harvard street to Vassar street, is about 685 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 28, 1916. Work was begun September 25, 1916, and

suspended December 11, 1916. It is a 40-foot street with a 26-foot sheet asphalt roadway on a 4-inch Portland cement concrete base, granite edgestone, flagging crosswalks and artificial stone sidewalks 7 feet in width. The asphalt roadway was laid under a five-year maintenance guaranty. The straight edgestone, flagging and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished on the line of the work. This street is completed with the exception of the artificial stone sidewalks, which will be completed early in the spring.

Rosewood street, from Oakland street to Randolph avenue, is about 1,529 feet in length. A contract for constructing the surface of this street was awarded to the John J. Kelly Company September 17, 1915. Work was begun November 9, 1915. The work this year consisted of laying a Trinidad asphalt roadway on a concrete base and constructing artificial stone sidewalks. The roadway and sidewalks were laid under a five-year maintenance guaranty. Work on this street was completed July 19, 1916.

Rowell street, from Hancock street to Cushing avenue. (Not started.)

Rugby road, from Randolph road to Oakland street. (Not started.)

Saville street, from Park street to Stratford street. (Not started.)

Selwyn street, from Farquhar street to 1,174 feet northeasterly. (Not started.)

Southwick street, from Neponset avenue to Freeport street, is about 359 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 28, 1916. It is a 40-foot street with a 26-foot roadway and 7-foot sidewalks. When completed this street will have a sheet asphalt roadway on a 4-inch concrete base, granite edgestone and artificial stone sidewalks. The work done this year consisted of placing some filling and grading part of the street. Work will be resumed early in the spring.

Spring street, at West Department, Boston City Hospital, is about 1,528 feet in length. A contract to construct artificial stone steps, iron and wooden fences was awarded to the McNeil Construction Company October 4, 1915. Work was begun October 31, 1915, and completed June 3, 1916. The work this year consisted of building iron fences.

St. Rose street, from South street about 416 feet westerly. (Not started.)

Sturtevant street, from Park street to across Gibson street, is about 567 feet in length. A contract for constructing the surface of this street was awarded to James Doherty December 3, 1915. Work was begun December 6, 1915, and suspended December 29, 1915. Work was resumed April 4, 1916, and completed June 19, 1916. It is a 33-foot street with a 22-foot

Hassam block roadway, granite flagging, granite edgestone and 5½-foot artificial stone sidewalks. The straight edgestone, corners and flagging were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The contractor furnished all other materials necessary to do the work. The artificial stone sidewalks were laid under a five-year maintenance guaranty.

Temple street, from Spring street to Ivory street, is about 1,091 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 18, 1916. Work was begun August 16, 1916, and suspended December 15, 1916. It is a 40-foot street and is to have a sheet asphalt pavement on a 4-inch Portland cement concrete base, granite edgestone and artificial stone sidewalks 7 feet in width. The straight edgestone, paving blocks and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The work done this year consisted of setting edgestone, laying part of the concrete base for roadway and grading. Work will be completed early in the spring.

Theodore street, from Morton street about 618 feet easterly. A contract for constructing the surface of this street was awarded to the Central Construction Company July 28, 1916. Work was begun November 11, 1916, and suspended December 15, 1916. It is a 40-foot street with a 26-foot asphalt roadway on a 4-inch concrete base, granite edgestone and artificial stone sidewalks 7 feet in width. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The work this year consisted of rough grading. Work will be resumed early in the spring.

Trent street, from Coleman street to Clarkson street, is about 228 feet in length. A contract for constructing artificial stone sidewalks and laying a sheet asphalt wearing surface on this street was awarded to William J. Rafferty December 20, 1915. Work was begun on the asphalt surface December 16, 1915, and completed the same day. Work on the artificial stone sidewalk was started April 12, 1916, and completed April 19, 1916. The asphalt surface and artificial stone sidewalks were laid under a five-year maintenance guaranty. The contractor furnished all material necessary to do the work.

Tuckerman street, from Dorchester street to Middle street, is about 375 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 28, 1916. Work was begun August 12, 1916, and completed October 6, 1916. This street varies in width from 28 to 30 feet and has an asphalt roadway 18 to 20 feet wide on a 4-inch Portland cement concrete base, granite edgestone, flagging crosswalks and artificial stone sidewalks 5 feet

in width. The artificial stone sidewalks and asphalt roadway were laid under a five-year maintenance guaranty. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor.

Upland avenue, from Park street to Melville avenue, is about 748 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 28, 1916. Work was begun August 9, 1916, and suspended December 15, 1916. It is a 60-foot street with a 30-foot sheet asphalt roadway on a 4-inch Portland cement concrete base, granite edgestone and sidewalks, 15 feet in width, consisting of a 5-foot artificial stone walk and a loam space. The asphalt roadway was laid under a five-year maintenance guaranty. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other material was furnished by the contractor. This street is practically completed with the exception of the artificial stone sidewalk, which will be completed early in the spring. This street was regulated by the Paving Service forces in 1915.

Wait street, from Hillside street to Sachem street, is about 163 feet in length. A contract to build concrete walls, steps and platforms with iron fences and hand rails and artificial stone sidewalks in this street was awarded to James Doherty April 27, 1916. Work was started July 12, 1916, and completed September 11, 1916. This is a 40-foot street with 7-foot sidewalks. The contractor did the subgrading, set the edgestone, laid granite block gutters, laid flagging crosswalks, constructed a 6-inch tar macadam roadway, laid artificial stone sidewalks and built fences. The city furnished the straight edgestone, paving block, flagging and corners and the same was hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other materials were furnished by the contractor. The artificial stone sidewalks were laid under a five-year maintenance guaranty.

Washington street, from Morton street to Asticou road, is about 510 feet in length. A contract to construct this street was awarded to James Doherty August 30, 1916. Work was begun September 11, 1916, and suspended December 15, 1916. A new 20-foot roadway was constructed on the northwest side of the Forest Hills Elevated Station. This roadway is of 5-inch granite blocks laid with cement grout joints on a 6-inch concrete base. The roadway was laid under a five-year maintenance guaranty. The northwest roadway under the elevated station was discontinued and the new roadway takes its place. The work this year consisted of setting edgestone, paving the roadway and relaying the necessary paving at approaches and placing cinders for artificial stone sidewalk. The work will be completed as early in the spring as practicable.

Wensley road, from Bucknam street to Bickford avenue. (Not started.)

Westwood street, from Richfield street to Wales place, is about 607 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company October 9, 1916. Work was begun November 11, 1916, and suspended December 14, 1916. When completed it will be a 40-foot street with a 26-foot sheet asphalt roadway on a 4-inch Portland cement concrete base with brick block gutters, granite edgestone, flagging crosswalks and artificial stone sidewalks 7 feet in width. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. The work done this year consisted of rough grading and setting the edgestone. Work will be resumed early in the spring.

Worthington street, from Longwood avenue to Fenway, is about 1,161 feet in length. The department forces set the edgestone, laid the crosswalks and placed the concrete base for the roadway. A contract to construct the surface of this street was awarded to the Central Construction Company January 15, 1916. The contractor furnished and laid a sheet asphalt pavement and constructed artificial stone sidewalks. The roadway and sidewalks were laid under a five-year maintenance guaranty.

Wordsworth street, from Horace street to Coleridge street. (Not started.)

William Jackson avenue, from Chestnut Hill avenue to Academy Hill road. (Not started.)

Wyoming street, from Wabeno street to Humboldt avenue. (Not started.)

Vista street, from Augustus avenue to Malvern road, is about 399 feet in length. A contract for constructing the surface of this street was awarded to Martino DeMatteo October 14, 1916. Work was begun October 31, 1916, and suspended December 1, 1916. It is a 40-foot street and is to have a 6-inch bituminous macadam roadway, granite edgestone and sidewalks, 7 feet in width, consisting in part of artificial stone and in part of artificial stone walk, $4\frac{1}{2}$ feet in width, with a seeded loam space. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was furnished by the city on the line of the work. All other material was furnished by the contractor. The work this year consisted of setting edgestone, placing cinders for artificial stone sidewalks and rough grading roadway. Work will be resumed early in the spring.

GENERAL.

Ashmont street, in front of St. Ann's Church. The contract for constructing artificial stone sidewalks in this street was

awarded to D. M. Biggs. Work was started September 20, 1916, and completed September 27, 1916. The contractor furnished all materials to lay the artificial stone sidewalks, which were laid under a five-year maintenance guaranty.

Belvidere street, from Massachusetts avenue to Dalton street. (Not started.)

Brookside avenue, in front of new school. A contract for constructing artificial stone sidewalks in this street was awarded to William J. Rafferty September 18, 1916. The contractor furnished all material necessary to lay the artificial stone sidewalks, which were laid under a five-year maintenance guaranty.

Corbet street, from Norfolk street to Morton street, is about 1,147 feet in length. A contract to construct artificial stone sidewalks in this street was awarded to James Doherty. The sidewalks, 7 feet in width, have been excavated and filled with cinders. Work will be completed early in the spring.

Dorchester avenue (easterly side), near Richmond street. A contract to construct artificial stone sidewalks in this street was awarded to D. M. Biggs & Co. The edgestone was furnished by the city and hauled and set by the contractor. All other material necessary to do the work was furnished by the contractor. The artificial stone sidewalks were laid under a five-year maintenance guaranty.

Dorchester avenue, from Ralston street 225 feet southerly. A contract to construct artificial stone sidewalks in this street was awarded to William J. Rafferty. The sidewalks as constructed are 10 feet in width. The contractor furnished all materials necessary to do the work. The sidewalks were laid under a five-year maintenance guaranty.

Dover street (north side), from Tremont street about 58 feet. A contract to construct artificial stone sidewalks in this street was awarded to V. Grande. The sidewalks as constructed are 10 feet in width. The contractor furnished all materials necessary to lay artificial stone sidewalks, which were laid under a five-year maintenance guaranty.

East Concord street (northerly side), from Harrison avenue 245 feet easterly. A contract to construct artificial stone sidewalks in this street was awarded to Jeremiah J. Sullivan June 30, 1916. The contractor reset the edgestone, relaid the granite block gutters and constructed artificial stone sidewalks 8 feet in width. The contractor furnished all materials necessary to do the work. The artificial stone sidewalks were laid under a five-year maintenance guaranty.

Falmouth street (easterly side), at Christian Science Church. A contract to construct artificial stone sidewalks in this street was awarded to William J. Rafferty & Co. August 23, 1916. The contractor did the excavating, reset the edgestone, relaid

the wood block pavement where necessary and constructed artificial stone sidewalks 8 feet in width. The sidewalks were laid under a five-year maintenance guaranty.

Florence street, from Ashland street to Poplar street. (Not started.)

Gladstone street, from Walley street to Upland street, is about 1,829 feet in length. A contract to regulate this street and construct artificial stone sidewalks was awarded to Agostino DeStefano September 15, 1915. Work was begun April 5, 1916, and completed July 19, 1916. This is a 40-foot street with 7-foot sidewalks. The contractor did the excavating, removed a number of trees, set the edgestone, paved the granite block gutters and constructed artificial stone sidewalks. The city furnished the edgestone and corners on the line of the work. The sidewalk was laid under a five-year maintenance guaranty.

Harrison avenue (easterly side), from Stoughton street to East Concord street, is about 306 feet in length. A contract to construct artificial stone sidewalks in this street was awarded to Jeremiah J. Sullivan June 30, 1916. The contractor did the excavating, reset part of the edgestone and laid artificial stone sidewalk under a five-year maintenance guaranty.

Harrison avenue, from Kneeland street to Harvard street, is about 285 feet in length. A contract to construct artificial stone sidewalks in this street was awarded to John McCourt. The contractor constructed the artificial stone sidewalks, 13 feet in width, under a five-year maintenance guaranty.

Haviland street, from Haviland terrace about 275 feet westerly. A contract to construct artificial stone sidewalks on this street was awarded to Charles J. Jacobs. The contractor constructed artificial stone sidewalks, 7 feet in width, under a five-year maintenance guaranty.

Hemenway street, a contract to construct artificial stone sidewalks in this street was awarded to Jeremiah J. Sullivan. The contractor constructed the artificial stone sidewalks under a five-year maintenance guaranty.

Huntington avenue (westerly side), at Christian Science Church Park. A contract to construct artificial stone sidewalks in this street was awarded to William J. Rafferty & Co. August 23, 1916. The contractor constructed the artificial stone sidewalks under a five-year maintenance guaranty.

Massachusetts avenue (east side), from Norway street about 67 feet northerly. A contract to construct artificial stone sidewalks in this street was awarded to V. Grande. The sidewalks, 15 feet in width, were laid under a five-year maintenance guaranty.

Medford street, from St. Mary's street to Kiswick street, is about 200 feet in length. A contract to construct artificial

stone sidewalks in this street was awarded to Jeremiah J. Sullivan. The sidewalks, 7 feet in width, were laid under a five-year maintenance guaranty.

Norfolk avenue (west side), Shirley street to Burrill street. (Not started.)

Poplar street, from Sycamore street to Brown avenue and Hilburn street, as extended, is about 1,766 feet in length. The contract for setting edgestone and constructing artificial stone sidewalks in this street was awarded to the John Kelly Company July 30, 1915. Work done this year consisted of constructing artificial stone sidewalks from Sycamore street to about 60 feet south of Hilburn street (on the east side and on the west side) to about 240 feet south of Hilburn street. These sidewalks were laid under a five-year maintenance guaranty.

Poplar street, from Washington street to Sycamore street, is about 1,107 feet in length. A contract for constructing artificial stone sidewalks in this street was awarded to James Doherty November 22, 1915. Work was begun May 24, 1916, and completed June 13, 1916. The contractor reset part of the edgestone, relaid the flagging crosswalks, repaved part of the granite block gutters and constructed artificial stone sidewalks 6 to 7 feet in width. The artificial stone sidewalks were laid under a five-year maintenance guaranty.

Rose street, from Harrison avenue to Albany street. A contract to patch and repair the macadam surface of this street was awarded to the Independent Coal Tar Company. This street was resurfaced with taric compound.

Saratoga street, from Butler avenue to Washburn avenue, is about 1,328 feet in length. A contract to construct artificial stone sidewalks in the street was awarded to Agostino DeStefano December 1, 1915. The contractor set the edgestone, laid the flagging crosswalks and constructed artificial stone sidewalks 8 feet in width. The sidewalks were laid under a five-year maintenance guaranty.

Scotia street, from St. Cecilia street to Dalton street. (Not started.)

Shirley street (south side), Clifton street to Norfolk avenue. (Not started.)

Stoughton street (south side), from Harrison avenue 266 feet easterly. A contract to construct artificial stone sidewalks in this street was awarded to Jeremiah J. Sullivan June 30, 1916. The contractor reset part of the edgestone and laid the artificial stone sidewalks under a five-year maintenance guaranty.

St. Cecilia street, from Boylston street to Belvidere street. (Not started.)

Tremont street (east side), from Dover street about 89 feet northerly. A contract to construct artificial stone sidewalks in this street was awarded to A. Grande. The contractor constructed artificial stone sidewalks 13 feet in width. These sidewalks were laid under a five-year maintenance guaranty.

Wachusett street, from Weld Hill street to Barlow street, is about 399 feet in length. A contract for excavating and grading this street was awarded to John Landis January 13, 1916. The work consisted of excavating earth and rock and grading the street.

Washington street, from Tip Top street to the Newton line, is about 1,325 feet in length. A contract to construct artificial stone sidewalks in this street was awarded to Agostino DeStefano November 24, 1915. The contractor laid the artificial stone sidewalks under a five-year maintenance guaranty.

Work Done by Contract, 1916.

| | Old. | New. | Total, Old and New. |
|---|---------------------|----------------------|------------------------|
| Edgestone set..... | 16,891 linear feet. | 36,501 linear feet. | 53,392 linear feet. |
| Crushed stone foundation for edgestone..... | ..... | 1,498 " " | 1,498 " " |
| Artificial stone curb laid..... | 36 " " | 50 " " | 86 " " |
| Concrete base laid..... | 3,729 square yards. | 79,316 square yards. | 83,045 square yards. |
| Granite block paving with asphalt joints..... | ..... | 119 " " | 119 " " |
| Granite block paving laid on a gravel base, with gravel joints..... | 1,769 " " | 124 " " | 1,893 " " |
| Flagging crosswalks laid on a gravel base, gravel joints..... | 205 " " | 12 " " | 217 " " |
| Granite block paving laid, with grout joints..... | 400 " " | 22,463 " " | 22,863 " " |
| Flagging crosswalks laid, with grout joints..... | 2 " " | 387 " " | 389 " " |
| Wood block pavement laid..... | 314 " " | 1,913 " " | 2,227 " " |
| Asphalt and binder laid..... | 47 " " | 50,228 " " | 50,275 " " |
| Asphalt patching..... | 27,347 " " | ..... | 27,347 " " |
| Bituminous concrete binder laid..... | 37 cubic yards. | ..... | 37 cubic yards. |
| Bitulithic patching, full depth..... | 1,272 square yards. | ..... | 1,272 square yards. |
| Bitulithic surface patching..... | 549 " " | ..... | 549 " " |
| Bitulithic pavement laid..... | 7 " " | 4,639 " " | 4,646 " " |
| Haesem block pavement laid..... | ..... | 5,123 " " | 5,123 " " |
| Brick block pavement laid (gutters)..... | ..... | 2,175 " " | 2,175 " " |
| Brick sidewalks laid..... | 6,645 " " | 1,981 " " | 8,626 " " |

| | | | | | | |
|--|-------|---|---|--------|-------------------|---------------------|
| Coal tar sidewalks laid..... | 34 | " | " | 34 | " | " |
| Artificial stone sidewalks laid..... | 1,204 | " | " | 29,873 | " | 31,077 |
| Earth excavation..... | | | | | | 34,971 cubic yards. |
| Water box excavation..... | | | | | | 380 |
| Rock excavation..... | | | | | | 1,014 |
| Filling furnished..... | | | | | | 5,958 |
| Macadam surface placed, tar preparation..... | | | | | 281 square yards. | 281 square yards. |
| Loam furnished and placed..... | | | | | 225 cubic yards. | 225 cubic yards. |
| Loam graded and seeded..... | | | | | 803 square yards. | 803 square yards. |
| Covers reset..... | | | | | | 228 |
| Concrete wall..... | | | | | 294 linear feet. | 294 linear feet. |
| Concrete wall..... | | | | | 81.1 cubic yards. | 81.1 cubic yards. |
| Sea wall, granite..... | | | | | 148 linear feet. | 148 linear feet. |
| Concrete backing for edgestone..... | | | | | 741 | 741 |
| Ground water drain..... | | | | | 442 | 442 |
| Artificial stone steps..... | | | | | 277 | 277 |
| Iron fence..... | | | | | 607 | 607 |
| Pipe rail fence..... | | | | | 625 | 625 |
| Wooden fence..... | | | | | 148 | 148 |
| Inlets..... | | | | | 8 | 8 |

1. 13,683 square yards laid, 4 inches in depth, remainder 6 inches deep.
 2. 1,204 square yards laid with old blocks, formerly with gravel or pitch and pebble joints.
 3. 47 square yards laid with old flagging, formerly with gravel or pitch and pebble joints.

Work Done by Paving Service Forces, 1916.

| | Old. | New. | Total, Old and New. |
|---|----------------------|---------------------|------------------------|
| Edgestone set..... | 40,438 linear feet. | 15,664 linear feet. | 56,998 linear feet. |
| Concrete base laid..... | 58,868 square yards. | 3,857 square yards. | 3, 857 square yards. |
| Granite block paving with gravel joints laid..... | 30 " | " | 58,898 " |
| Granite block paving with pitch and pebble joints laid..... | 5,157 " | " | 5,523 " |
| Granite block paving with grout joints laid..... | 1,953 " | " | 5,875 " |
| Gutter paving with gravel joints laid..... | 22,670 " | " | 24,795 " |
| Gutter paving with pitch and pebble joints laid..... | " | 146 " | 146 " |
| Gutter paving with grout joints laid..... | " | 328 " | 328 " |
| Flagging crosswalks with gravel joints laid..... | 11,208 " | 171 " | 11,379 " |
| Flagging crosswalks with pitch and pebble joints laid..... | 56 " | " | 56 " |
| Flagging crosswalks with grout joints laid..... | 44 " | " | 44 " |
| Wood block pavement with sand joints laid..... | " | 72 " | 72 " |
| Concrete pavement laid..... | " | 9,757 " | 9,757 " |
| Tar laid on granite blocks..... | 520 " | " | 520 " |
| Macedam surface placed (water binder)..... | 35,458 " | " | 35,458 " |
| Macedam surface placed (tar preparations)..... | 98,427 " | " | 98,427 " |
| Macedam surface placed (asphalt preparations)..... | 45,908 " | 711 " | 45,919 " |
| Macedam surface patched..... | 445,637 " | " | 445,637 " |
| Asphalt spread on macedam (blanket coat)*..... | 3,872 " | " | 3,872 " |

| | | | |
|---|--------|---------------------|---------------------|
| Brick sidewalks laid..... | 08,429 | 1,034 | 08,443 |
| Excavating for sidewalks..... | | 411 | 411 |
| Roadway excavating..... | | 1,126 cubic yards. | 1,126 cubic yards. |
| Roadway excavating..... | | 3,610 square yards. | 3,610 square yards. |
| Gravel or crushed stone sidewalks surfaced..... | 74,015 | 11,445 | 85,460 |
| Grading (no pavement laid)..... | | 1,199 cubic yards. | 1,199 cubic yards. |
| Grading (no pavement laid)..... | | 198 square yards. | 198 square yards. |
| Back excavating..... | | 100 cubic yards. | 100 cubic yards. |
| Macadam brick pavement..... | 144 | | 144 square yards. |

* Includes 2,271 square yards Colpoach roadway.

FINANCIAL STATEMENT, PAVING SERVICE.

Maintenance.

| | |
|------------------------|---------------------|
| Appropriation. | \$981,594 54 |
| Transfers | 2,315 70 |
| | <u>\$983,910 24</u> |

Special Appropriations.

| | |
|---|---------------------|
| Granolithic sidewalks: | |
| Balance February 1, 1916 | \$26,227 75 |
| Transferred from Reserve Fund | 25,000 00 |
| | <u>\$51,227 75</u> |
| Expended during the year | 16,574 44 |
| | <u>\$34,653 31</u> |
| Reconstructing and repairing streets by contract: | |
| Appropriation (from taxes) | \$400,513 35 |
| Transferred from Park and Recreation Department | 100,000 00 |
| | <u>\$500,513 35</u> |
| Expended during the year | 170,650 41 |
| | <u>\$329,962 94</u> |

Summary of Expenditures.

| | |
|---|-----------------------|
| Paving Service | \$983,910 24 |
| Highways, making of | 283,644 79 |
| Granolithic sidewalks | 16,574 44 |
| Belgrade avenue extension and Beech street widening | 59 40 |
| Chelsea street, Charlestown widening | 30 30 |
| Hyde Park avenue, widening | 490 98 |
| Norfolk street, Dorchester, widening | 570 58 |
| Reconstructing and repairing streets by contract | 170,650 41 |
| | <u>\$1,455,931 14</u> |

INCOME.

Statement showing the amount of bills deposited with the City Collector from February 1, 1916, to January 31, 1917, and credited to the general revenue.

PUBLIC WORKS DEPARTMENT.

181

| | |
|---|--------------------|
| Edgestone and sidewalk assessments | \$22,996 16 |
| Permits | 29,796 84 |
| Services of inspectors | 4,757 00 |
| Labor, material furnished, sale of junk, rents, etc. | 12,326 44 |
| | <hr/> |
| | <u>\$69,876 44</u> |

Amount paid into city treasury during the year:

| | |
|---|--------------------|
| Edgestone and sidewalk assessments | \$16,516 50 |
| Permits | 28,867 32 |
| Services of inspectors | 4,505 00 |
| Labor, material furnished, sale of junk, rents, etc. | 14,564 42 |
| | <hr/> |
| | <u>\$64,453 24</u> |

Objects of Expenditures from the Maintenance Appropriation Classified by Districts from
February 1, 1916, to January 31, 1917.

| Districts. | Macadam Repairs. | Block Repairs. | Removal of Snow. | Street Cleaning. | Edgestone and Sidewalk Repairs. | Crosswalk Repairs. | Street Work. | Schedule A, Miscellaneous. | Totals. |
|--|---------------------|--------------------|---------------------|--------------------|---------------------------------|--------------------|---------------------|----------------------------|---------------------|
| South Boston and Dorchester North..... | \$10,604 19 | \$3,486 23 | \$13,492 37 | \$4,157 87 | \$7,973 81 | \$865 69 | \$27,802 02 | ..... | \$88,451 13 |
| East Boston and Breed's Island..... | 7,394 08 | 763 49 | 5,992 93 | 927 91 | 2,954 44 | 236 81 | 11,241 64 | ..... | 20,511 30 |
| Charlestown..... | 10,412 12 | 5,696 81 | 8,416 05 | 2,406 73 | 5,436 38 | 1,050 94 | 2,418 34 | ..... | 34,837 39 |
| Brighton..... | 9,744 93 | 40 24 | 8,876 96 | 13,616 53 | 1,334 77 | 328 21 | 24,447 70 | ..... | 55,389 34 |
| West Roxbury..... | 18,260 40 | 65 95 | 13,717 49 | 15,032 58 | 3,567 62 | 202 89 | 27,323 82 | ..... | 78,170 75 |
| Dorchester..... | 10,953 67 | 142 89 | 9,603 31 | 4,670 43 | 5,056 43 | 97 35 | 21,845 65 | ..... | 52,369 78 |
| Roxbury South and Jamaica Plain..... | 14,455 02 | 4,038 41 | 24,916 16 | 28,136 45 | 9,851 45 | 1,271 91 | 8,402 44 | ..... | 91,071 84 |
| South End and Roxbury North..... | 11,692 96 | 5,070 88 | 40,067 46 | 4,951 65 | 18,675 08 | 3,913 35 | 17,011 11 | ..... | 101,382 40 |
| Ashmont..... | 10,468 83 | 141 71 | 5,794 37 | 5,434 99 | 1,817 04 | 172 59 | 10,868 27 | ..... | 34,637 80 |
| North and West Ends and Back Bay..... | 4,378 06 | 5,857 76 | 45,477 62 | 3,604 04 | 6,870 41 | 3,217 01 | 6,163 49 | ..... | 75,568 30 |
| Hyde Park..... | 5,749 56 | 6 17 | 5,464 79 | 7,128 57 | 1,799 04 | 33 22 | 7,281 13 | ..... | 27,462 45 |
| Miscellaneous..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | \$331,057 57 | 331,057 57 |
| Totals..... | \$114,113 82 | \$25,280 54 | \$191,759 51 | \$90,067 75 | \$65,335 47 | \$11,389 97 | \$164,895 61 | \$331,057 57 | \$983,200 24 |

SCHEDULE A.

| | | |
|---|----------|--------------|
| Salary of division engineer (part of) | | \$834 00 |
| Salary of chief engineer (part of) | | 900 00 |
| Salary of chief inspector (part of) | | 95 90 |
| Salaries of office clerks, stenographers and messengers | | 2,340 75 |
| Salary of engineer in charge | | 3,000 00 |
| Salaries of assistant engineers (office work) | | 14,378 40 |
| Salaries of permit office clerks | | 8,240 83 |
| Salaries of permit office inspectors | | 14,647 96 |
| Salaries of inspectors on artificial stone sidewalks | | 2,208 38 |
| Salaries of engineering inspectors (office work) | | 3,513 40 |
| Salaries of district inspectors | | 3,679 88 |
| Salaries of numbering clerks | | 1,196 52 |
| Salary of medical inspector (part of) | | 311 11 |
| Medical attendance on injured employees | | 28 00 |
| Salary of chief veterinarian (part of) | | 472 22 |
| Salary of inspector of horses | | 996 84 |
| Salary of constable | | 1,028 37 |
| Pensions paid to veterans of Civil War (retired) | | 13,498 25 |
| Pensions paid to retired laborers | | 29,838 55 |
| Pay allowed injured employees | | 2,797 99 |
| Pay allowed employees on military service | | 197 50 |
| Vacations allowed laborers and mechanics, etc. | | 21,252 65 |
| Holidays, not including holidays charged to street accounts | | 40,773 88 |
| Automobile expense, division engineer | | 1,793 28 |
| Gasolene, grease, etc. | \$255 12 | |
| Repairs | 140 25 | |
| New tires and tubes | 228 79 | |
| Repairing tubes and tires | 11 60 | |
| Supplies, etc. | 54 27 | |
| Wages of chauffeur | 1,092 00 | |
| Miscellaneous | 11 25 | |
| Automobile expense, engineer in charge | | 1,886 30 |
| Gasolene, grease, etc. | 292 21 | |
| Repairs | 192 75 | |
| New tires and tubes | 206 35 | |
| Repairing tires and tubes | 11 15 | |
| Supplies, etc. | 34 34 | |
| Wages of chauffeur | 1,134 00 | |
| Miscellaneous | 15 50 | |
| Automobile expense, emergency car | | 709 33 |
| Gasolene, grease, etc. | 169 28 | |
| New tubes and tires | 78 26 | |
| Repairs | 440 25 | |
| Carried forward | | \$170,620 29 |

| | | |
|---|---------|--------------|
| <i>Brought forward</i> | | \$170,620 29 |
| Miscellaneous | \$15 54 | |
| Supplies | 6 00 | |
| Automobile expense, chief inspector | | 672 57 |
| Gasolene, grease, etc. | 55 91 | |
| Repairs | 77 33 | |
| New tires and tubes | 112 33 | |
| Storage | 45 00 | |
| Wages of chauffeur | 357 00 | |
| Supplies | 25 00 | |
| Automobile expense, foreman Brighton district | | 1,575 52 |
| Gasolene, grease, etc. | 243 56 | |
| Repairs | 296 22 | |
| New tires and tubes | 265 45 | |
| Repairing tires and tubes | 6 60 | |
| Supplies, etc. | 63 69 | |
| Wages of chauffeur | 680 00 | |
| Miscellaneous | 20 00 | |
| Automobile expense, foreman Dorchester district | | 396 41 |
| Gasolene, grease, etc. | 171 91 | |
| Repairs | 98 42 | |
| New tires and tubes | 58 53 | |
| Repairing tires and tubes | 7 00 | |
| Supplies, etc. | 48 39 | |
| Miscellaneous | 12 16 | |
| Automobile, claim agent | | 279 06 |
| Gasolene, grease, etc. | 60 75 | |
| Repairs | 22 13 | |
| New tires and tubes | 146 56 | |
| Supplies, etc. | 35 52 | |
| Miscellaneous | 14 10 | |
| Newspapers, magazines, etc. | | 3 00 |
| Advertising | | 52 28 |
| Printing | | 2,940 97 |
| Postage | | 321 06 |
| Stationery | | 652 98 |
| Directories | | 28 00 |
| Traveling expenses, car fares, etc. | | 649 13 |
| Engineering supplies and incidentals | | 2,260 08 |
| Stationery | 640 91 | |
| Printing | 297 40 | |
| Postage | 162 58 | |
| Car fares | 324 09 | |
| Transit repairs | 225 90 | |
| Laboratory supplies and miscellaneous charges | 609 20 | |
| <i>Carried forward</i> | | \$180,451 35 |

PUBLIC WORKS DEPARTMENT.

185

| | | |
|---|-----------|----------|
| <i>Brought forward</i> | \$180,451 | 35 |
| Artificial stone sidewalks (see reconstructing and repaving streets by contract) | | 281 22 |
| Rebates allowed to contractors | \$74 | 97 |
| Repairs made | 206 | 25 |
| Asphalt and bitulithic pavements repaired (see also reconstructing and repaving streets by contract) | | 3,749 20 |
| Temporary repairs, labor, materials, etc. | \$903 | 36 |
| Engineering | 1,634 | 95 |
| Inspection | 817 | 25 |
| Engineering expense | 2 | 50 |
| Amount paid to Central Construction Company, asphalt repairs | 148 | 53 |
| Amount paid to Barber Asphalt Paving Company, asphalt repairs | 242 | 61 |
| Brick block repairs, labor, materials, etc. | 2,226 | 67 |
| Wood block repairs, labor, materials, etc. | 2,750 | 24 |
| New crosswalks, not included elsewhere | 825 | 44 |
| Fence repairs | 3,881 | 93 |
| Plank walk repairs | 1,677 | 31 |
| Edgestones, sidewalks and gutters (new) not included elsewhere | 12,723 | 09 |
| Rent of land, wharves, etc. (net) | 1,683 | 33 |
| Taxes (net) | 445 | 38 |
| Wharfage | 150 | 00 |
| Horses purchased | 700 | 00 |
| Expense of stables, including drivers, feeders, fodder, horseshoeing, repairs to harnesses, wagons, carts, etc. | \$126,393 | 75 |
| Amount earned by department teams | 117,024 | 88 |
| | | 9,368 87 |
| Electric lighting at yards and stables | 1,409 | 46 |
| Gas lighting at yards and stables | 159 | 11 |
| Fuel for heating yard buildings, offices and stables, Electric appliances, labor and stock, yards and stables | 2,353 | 69 |
| Concrete mixers, repairs, supplies, etc. | 406 | 82 |
| Rent of towels | 130 | 00 |
| Stones, pipes, grates, etc. | 111 | 22 |
| Telephone service | 1,630 | 84 |
| Derricks, repairing, etc. | 244 | 90 |
| Oil for street lighting | 709 | 35 |
| <i>Carried forward</i> | \$228,094 | 82 |

| | | |
|--|-------------|---------------------|
| <i>Brought forward</i> | | \$228,094 82 |
| Ice | | 63 33 |
| Oatmeal | | 75 75 |
| Signs, making and putting up | | 8,684 65 |
| Labor at snow dumps | | 751 71 |
| Tools, hardware, etc., new, cost of repairing, etc., | | 17,562 05 |
| Road King graders and scrapers | | 2,302 00 |
| Repairs at Traverse Street Subway | | 65 00 |
| Expense of yards, including salaries of foremen, clerks, yardmen, watchman, tool wagons, etc. | | 39,026 83 |
| Repairs of yard buildings, stables, sheds, shanties, etc. | | 5,768 84 |
| Sanding icy and slippery streets | | 3,108 72 |
| Repairing culverts and building new culverts | | 108 84 |
| Hoister engine, fuel and supplies | | 171 55 |
| Uniforms, etc. | | 168 94 |
| Trimming and removing trees | | 70 79 |
| Borings at Albany Street Yard | | 202 76 |
| Chests for Central Office, making | | 101 80 |
| Repairing fence at South Street Subway | | 250 26 |
| Freight and cartage | | 48 56 |
| Marking catch-basins | | 153 00 |
| Asphalt, oil, analysis and paving block testing | | 557 00 |
| Photographs | | 45 50 |
| Cleaning vault | | 24 00 |
| Sundries | | 24 85 |
| Sewer Service, work done and materials furnished, not shown elsewhere | | 122 50 |
| Park and Recreation Department, work done and materials furnished, not shown elsewhere | | 63 55 |
| Work done and materials furnished individuals, corporations, etc. | | 1,763 38 |
| Stock, materials | \$65,108 92 | |
| Stock, handling and teaming | 21,687 08 | |
| | <hr/> | |
| | \$86,796 00 | |
| Less stock delivered on streets | 62,860 55 | |
| | <hr/> | |
| | | 23,935 45 |
| | | <hr/> |
| | | \$333,316 43 |
| Steam rollers, amount earned | \$18,856 40 | |
| Steam rollers, cost of operating, re- pairing, etc. | 16,597 54 | |
| | <hr/> | |
| | | 2,258 86 |
| | | <hr/> |
| | | <u>\$331,057 57</u> |

**STREET WORK DONE BY DEPARTMENT FORCE AND
CHARGED TO MAINTENANCE APPROPRIATION SHOWN
IN DETAIL. WORK ON OTHER STREETS SHOWN ON
LARGE INSERT.**

Beacon street, from Newton line towards Cleveland circle. (Work unfinished.) Concrete roadway built 6 inches deep. Length, 2,316 linear feet. Width, 25 feet. Area, 6,433 square yards. Tar macadam gutters laid 3 inches deep; area, 4,976 square yards.

| | |
|---|--------------------|
| Labor, engineering | \$9 76 |
| Labor, excavating for edgestone | 73 58 |
| Labor, resetting for edgestone | 63 75 |
| Labor, gutter excavating | 42 00 |
| Labor, gutter repaving | 41 25 |
| Labor, grading for gravel sidewalks | 289 15 |
| Labor, excavating roadway | 2,420 08 |
| Labor, spreading stone | 366 30 |
| Labor, mixing concrete and placing same | 2,633 02 |
| Flagging, 603 feet | 217 08 |
| Teaming | 581 24 |
| Steam roller | 568 50 |
| Crushed stone, 1,960 tons | 2,705 03 |
| Lime hydrated, 30 tons | 375 00 |
| Sand, 728 cubic yards | 691 60 |
| Cement, 2,337 barrels | 4,434 81 |
| Tarvia, 8,359 gallons | 647 87 |
| 566 pounds canvas covering | 78 90 |
| Boots | 6 40 |
| Moving booth | 50 00 |
| Lumber | 123 74 |
| Hose, 200 feet garden | 19 00 |
| Hose, 15 feet fire | 7 50 |
| Pipe fittings and laying | 144 28 |
| Expansion joint, 2,240 feet | 113 33 |
| Wire mesh, 7,383 pounds | 332 24 |
| Hardware | 101 85 |
| Concrete mixer, hire of | 360 00 |
| Miscellaneous | 8 65 |
| Fuel | 107 07 |
| Oil | 1 34 |
| Waste | 7 15 |
| | <hr/> |
| | \$17,621 47 |

Charles street, from Dorchester avenue to Geneva avenue. Length, 1,395 feet. Area, 4,907 square yards. Two thousand four hundred eighty-six square yards. Asphalt macadam surface laid 7 inches deep, 1,354 square yards. Concrete pavement laid 6 inches deep, 166 square yards. Gutter repaved with asphalt joints and 138 square yards. Gutter repaved with grout joints.

| | |
|-------------------------------------|-------------------|
| Engineering | \$58 65 |
| Engineering expense | 1 15 |
| Edgestone | 7 30 |
| Lumber | 46 22 |
| Cement, 327 barrels | 653 20 |
| Crushed stone, 1,003 tons | 1,303 45 |
| Sand | 11 25 |
| Wire mesh, 2,474 pounds | 111 32 |
| | <hr/> |
| <i>Carried forward</i> | \$2,192 54 |

| | |
|------------------------------------|------------|
| <i>Brought forward</i> | \$2,192 54 |
| Gravel | 33 00 |
| Road oil Bermudez, 7,518 gallons | 1,351 11 |
| Bolts, etc., for strike board | 9 30 |
| Expansion joint, 1,990 feet | 100 68 |
| Hose | 14 25 |
| Water barrels | 4 50 |
| Hydrated lime, 1 ton | 12 50 |
| Steam roller | 494 00 |
| Repairs to strike board | 54 10 |
| Labor, street cleaning | 79 50 |
| Labor, excavating edgestone | 31 63 |
| Labor, resetting edgestone | 27 50 |
| Labor, roadway excavating | 1,180 89 |
| Labor, roadway spreading | 246 24 |
| Labor, mixing and placing concrete | 682 59 |
| Labor, crosswalk relaying | 47 75 |
| Labor, gutter excavating | 207 24 |
| Labor, gutter repaving | 145 75 |
| Teaming | 580 65 |
| Use of concrete mixer | 85 00 |
| | <hr/> |
| | \$7,580 72 |
| Credit: Old blocks | 309 00 |

\$7,271 72

North Centre street, from Hanover street to North street. Length, 375 feet. Area, 832 square yards. Repaved 832 square yards roadway with second-hand blocks on a concrete base with pitch and pebble joints, reset 465 feet edgestone, relaid 161 square yards brick sidewalks, and 39 square yards crosswalks relaid.

| | |
|------------------------------------|---------|
| Edgestone | \$11 78 |
| Bricks, 4,200 sidewalk | 52 50 |
| Lumber | 10 00 |
| Crushed stone, 139.5 tons | 181 35 |
| Pebbles, 25.3 tons | 69 64 |
| Cement, 104 barrels | 205 92 |
| Fuel | 10 50 |
| Gasolene | 5 00 |
| Pitch, 11 tons | 133 20 |
| Gravel, 189 tons | 122 62 |
| Sand, 9 tons | 9 00 |
| Labor on templates | 5 50 |
| Labor, edgestone excavating | 39 00 |
| Labor, edgestone resetting | 56 25 |
| Labor, sidewalk excavating | 6 50 |
| Labor, sidewalk relaying | 43 25 |
| Labor, roadway excavating | 292 00 |
| Labor, roadway paving | 205 00 |
| Labor, concrete mixing and placing | 407 50 |
| Labor, crosswalk relaying | 15 00 |
| Teaming | 767 00 |

\$2,648 51

Credit: Old blocks 64 10

\$2,584 41

SPECIAL APPROPRIATIONS.

Belgrade avenue Extension and Beech street, widening. (Work not started.)
 Engineering \$59 40

Chelsea street (Charlestown), widening. (Work not started.)
 Engineering \$30 30

Hyde Park avenue, widening. (Work not started.)
 Engineering \$490 98

Norfolk street (Dorchester), widening. (Work not started.)
 Engineering \$570 78

* *Charles street (now Caledonian avenue), between Spring and Hamilton streets. Excavated and graded. (Work unfinished.)*

Engineering \$84 92

Inspection 54 50

Advertising 4 50

Amount paid to Frank Drinkwater, under contract:

200 cubic yards earth excavation
 @ \$1 \$200 00

80 cubic yards rock excavation
 @ \$2 160 00

\$360 00

Less 15 per cent retained 54 00

306 00

\$449 92

GRANOLITHIC SIDEWALK CONSTRUCTION.

Amherst street, from Penfield street to Belgrade avenue. (Work not started.)

Engineering expense \$0 45

Ashmont street, from Neponset avenue 200 feet westerly.

Engineering \$7 00

Inspection 3 53

Engineering expense 40

Amount paid to D. M. Biggs & Co.:

187 feet edgestone reset @ 15c., \$28 05

42 square yards block gutter
 repaved @ 50c. 21 00

1,652 square feet artificial stone
 sidewalks furnished and

laid @ 18c. 297 36

6 hours, stonecutter 4 14

350 55

\$361 48

* This account charged to Highways, making of, instead of Special Appropriation.

* *Bayswater street*, from Saratoga street to Austin avenue. Length, 1,045 linear feet. Edgestone reset, granite block gutters repaved and artificial stone sidewalks constructed. (Work done in 1915.)

Engineering expense \$0 43

Amount paid Agostino DeStefano, under contract:

| | |
|---|----------|
| 434 linear feet existing edgestone reset @ 12c. | \$52 08 |
| 145 square yards existing granite block paving relaid @ 60c. | 87 00 |
| 84 square yards existing brick sidewalks relaid @ 40c. | 33 60 |
| 11,258 square feet artificial stone sidewalks furnished and laid @ 11c. | 1,238 38 |
| 179 square feet artificial stone driveways furnished and laid @ 14c. | 25 06 |

\$1,436 12
1,364 31

Less amount paid in 1915,

71 81

\$72 24

Belfort street, from Dorchester avenue to Saxton street. (Work not started.)

Engineering expense \$0 50

Belvidere street, from Massachusetts avenue to Dalton street. (Work not started.)

| | |
|-----------------------|---------|
| Engineering | \$34 50 |
| Advertising | 94 |

\$35 44

Birch street, from Penfield street to Corinth street. (Work not started.)

Engineering expense \$0 75

Blue Hill avenue (easterly side), Washington street to Morton street; (westerly side), Cheney street to Seaver street. (Unfinished work from 1915.)

| | |
|-------------------------------|--------|
| Engineering | \$6 09 |
| Inspection | 32 17 |
| Engineering expense | 35 |

Amount paid to James Doherty:

| | |
|---|--------|
| 2 manholes regulated @ \$3, | \$6 00 |
| 125 feet 6 inches edgestone reset @ 11c. | 13 81 |
| 37 square yards gutter repaved @ 30c. | 11 10 |
| 2,121 square feet artificial stone sidewalks furnished and laid @ 14½c. | 312 85 |

343 76

\$382 37

Credit: 765 old blocks

15 30

\$367 07

* Done in connection with Gladstone street.

PUBLIC WORKS DEPARTMENT.

191

Bourne street (north side), from Walk Hill street to Patten street. (Work done in 1915.)

Engineering expense \$0 10

Bowdoin street (west side), from Bowdoin avenue to Bullard street. (Work done in 1915.)

Engineering expense \$0 15

Brooks street, from Fansuil street to Hobart street. (Work not started.)

Engineering expense \$1 20

Brookside avenue, from Boylston street to Green street. (Work not started.)

Engineering expense \$0 30

Corbet street, from Norfolk street to Morton street. (Work started, no payments made on contract.)

| | | |
|-------------------------------|---------|----------------|
| Engineering | \$20 45 | |
| Inspection | 61 55 | |
| Engineering expense | 50 | |
| Advertising | 93 | |
| Edgestone | 6 72 | |
| | | <u>\$90 15</u> |

Creighton street, from Centre street to Day street. (Work done in 1915.)

Engineering expense \$0 20

Day street, from Centre street to Minden street. (Work done in 1915.)

Engineering expense \$0 60

Dorchester avenue (easterly side), near Richmond street.

| | |
|---------------------------------------|----------------|
| Engineering | \$12 45 |
| Inspection | 30 01 |
| Engineering expense | 45 |
| Advertising | 4 50 |
| Edgestone, 17 feet straight | 10 61 |
| | <u>\$58 02</u> |

| | | |
|----------------------------------|--------|----------------|
| Credit: 1 small corner | \$3 60 | |
| 665 old granite blocks | 13 30 | |
| | | <u>16 90</u> |
| | | <u>\$41 12</u> |

| | |
|---|-----------------|
| 127 linear feet existing edge-stone reset @ 15c. | \$19 05 |
| 18 square yards existing granite block paving relaid, gravel joints, @ 50c. | 9 00 |
| 1,623 square feet artificial stone sidewalks furnished and laid @ 18c. | 292 14 |
| 100 square feet artificial stone driveways furnished and laid @ 18c. | 18 00 |
| | <u>\$338 19</u> |

| | | |
|--------------------------------------|-------|---------------|
| Less 15 per cent retained, | 50 73 | |
| | | <u>287 46</u> |

\$328 58

Dorchester avenue, at Nos. 1542, 1544, 1582, 1584, 1586 and 1588. (Work not started.)

| | | |
|-------------------------------|--------|---------------|
| Engineering expense | \$0 10 | |
| Advertising | 92 | |
| | | <u>\$1 02</u> |

Dorchester avenue, 110 feet southerly from Ralston street.

| | | |
|---|--|-----------------|
| Amount paid to William Rafferty & Co.: | | |
| 2,125 square feet artificial stone walks constructed @ 20c. . | | <u>\$425 00</u> |

Dover street (north side), from Tremont street to 58 feet easterly.

| | | |
|--|-----------------|-----------------|
| Engineering | \$33 61 | |
| Inspection | 14 25 | |
| Engineering expense | 55 | |
| Advertising | 93 | |
| Amount paid to V. Grande, under contract: | | |
| 72 linear feet existing edge-stone reset @ 25c. | \$18 00 | |
| 16 square yards existing granite block paving relaid @ \$1 | 16 00 | |
| 4 square yards existing brick sidewalks relaid @ 60c. | 2 40 | |
| 659 square feet artificial stone sidewalks furnished and laid @ 24c. | 158 16 | |
| | <u>\$194 56</u> | |
| Less 15 per cent retained | 29 18 | |
| | | <u>165 38</u> |
| | | <u>\$214 72</u> |

Dracut street, from *Dorchester avenue* to Bruce street. (Work done in 1915.)

| | |
|-------------------------------|---------------|
| Engineering expense | <u>\$0 05</u> |
|-------------------------------|---------------|

East Concord street (northerly side), from Harrison avenue to 245 feet easterly. Length, 248 linear feet. Area, 1,759 square feet. Edge-stone reset, granite block gutters repaved and artificial stone sidewalks constructed.

| | | |
|---|----------------|----------------|
| Engineering | \$10 58 | |
| Inspection | 14 00 | |
| Engineering expense | 15 | |
| Advertising | 1 50 | |
| | <u>\$26 23</u> | |
| Credit: 2,000 old sidewalk bricks | 14 00 | |
| | | <u>\$12 23</u> |

Amount paid to Jeremiah J. Sullivan, under contract:

| | | |
|---|---------|----------------|
| 241 linear feet existing edgestone reset @ 12c., | \$28 92 | |
| 80 square yards existing granite block paving relaid @ 40c. | 32 00 | |
| | | <u>\$60 92</u> |
| Carried forward | | <u>\$12 23</u> |

PUBLIC WORKS DEPARTMENT.

193

| | | | |
|--|---------|----------|-----------------|
| <i>Brought forward</i> | \$60 92 | \$12 23 | |
| 1,665 square feet artificial stone sidewalks furnished and laid @ 15c. | 249 75 | | |
| 94 square feet artificial stone driveways furnished and laid @ 15c. | 14 10 | | |
| | | 324 77 | |
| | | | <u>\$337 00</u> |
| <i>Elmo street</i> , from Erie street to Greenwood street. (Work not started.) | | | |
| Engineering expense | | | <u>\$1 10</u> |
| <i>Evergreen street</i> (westerly side), from South Huntington avenue to Day street. (Work not started.) | | | |
| Engineering expense | | | <u>\$0 75</u> |
| <i>Florence street</i> , from Poplar street to Ashland street. (Work not started.) | | | |
| Engineering | | \$17 00 | |
| Advertising | | 93 | |
| | | | <u>\$17 93</u> |
| <i>Falmouth street</i> (easterly side), at Christian Science Church Park. | | | |
| Engineering | | \$10 28 | |
| Inspection | | 33 24 | |
| Engineering expense | | 1 20 | |
| Advertising | | 2 25 | |
| Amount paid to William J. Rafferty & Co., under contract: | | | |
| 185 linear feet existing edge- stone reset @ 15c. | \$27 75 | | |
| 2,812 square feet artificial stone sidewalks furnished and laid @ 19c. | 534 28 | | |
| Extra Work — Repair wood block pavement in Falmouth street where edgestone was set. | | | |
| 40 hours' labor @ 40c. | 16 00 | | |
| Plus 15 per cent on \$16 | 2 40 | | |
| 1 day, double team, @ \$6 | 6 00 | | |
| 50 gallons pitch @ 10c. | 5 00 | | |
| 16 cubic feet sand @ 5c. | 80 | | |
| | | 592 23 | |
| | | \$639 20 | |
| Credit: 14,000 old sidewalk bricks | | 98 00 | |
| | | | <u>\$541 20</u> |
| * <i>Gladstone street</i> , from Walley street to Upland street. Length, 1,829 linear feet. Edgestone reset, granite block gutters repaved and artificial stone sidewalks constructed. | | | |
| Engineering | | \$67 01 | |
| Inspection | | 122 50 | |
| Engineering expense | | 2 37 | |
| <i>Carried forward</i> | | \$191 88 | |

* Done in connection with Bayswater street.

| | | |
|---|------------|----------|
| <i>Brought forward</i> | | \$191 88 |
| Edgestone | | 48 91 |
| Labor, setting edgestone | | 6 00 |
| Teaming | | 10 00 |
| Amount paid Agostino DeStefano, under contract: | | |
| Removing trees, bushes, etc. | \$15 00 | |
| 30 cubic yards water box excavation @ 75c. | 22 50 | |
| 2,688 linear feet straight edgestone and corners set @ 12c. | 322 56 | |
| 52 linear feet circular edgestone set @ 15c. | 7 80 | |
| 1,470 linear feet crushed stone and concrete foundation furnished and placed @ 15c. | 220 50 | |
| 120 square yards granite block paving hauled and laid @ 65c. | 78 00 | |
| 370 square yards existing granite block paving relaid @ 60c. | 222 00 | |
| 16,658 square feet artificial stone sidewalks furnished and laid @ 11c. | 1,832 38 | |
| 440 square feet artificial stone driveways furnished and laid @ 14c. | 61 60 | |
| Extra work — Cut edgestone as directed: | | |
| 2 hours, stonecutter, @ 62½c. | 1 25 | |
| Plus 15 per cent on \$1.25, | 19 | |
| Extra work — Rehaul paving blocks and corners: | | |
| 23 hours' labor @ 25c. | 5 75 | |
| Plus 15 per cent on \$5.75, | 86 | |
| 18 hours, double team, @ 75c. | 13 50 | |
| Extra work — Excavate gutters beyond limit of paving: | | |
| 81 hours' labor @ 25c. | 20 25 | |
| Plus 15 per cent on \$20.25 | 3 04 | |
| 8 hours, double team, @ 75c. | 6 00 | |
| Extra work — Remove edgestone already set and construct new driveway: | | |
| 8 hours, edgestone setter, @ 62½c. | 5 00 | |
| 8 hours, helper, @ 31½c. | 2 50 | |
| Plus 15 per cent on \$7.50, | 1 13 | |
| 2½ hours, double team, @ 75c. | 1 88 | |
| <i>Carried forward</i> | \$2,843 69 | \$256 79 |

| | | |
|---|-------------------|--------------------------|
| <i>Brought forward</i> | \$2,843 69 | \$256 79 |
| Extra work — Remove trees not shown on plan: | | |
| 6 trees removed @ \$40 | 240 00 | |
| Extra work — Furnish extra gravel under edgestone: | | |
| 367 cubic feet gravel furnished @ 5c. | 18 35 | |
| Extra work — Excavate and set edgestone on Gladstone street where trees were removed: | | |
| 2 hours, foreman, @ 62½c. | 1 25 | |
| 3 hours, edgestone setter, @ 62½c. | 1 88 | |
| 3 hours, helper, @ 31½c. | 94 | |
| 17½ hours labor @ 25c. | 4 38 | |
| Plus 15 per cent on \$8.45, | 1 27 | |
| 1 hour, double team. @ 75c. | 75 | |
| | <u>\$3,112 51</u> | |
| Less amount paid in 1915, | <u>1,813 41</u> | |
| | | <u>1,299 10</u> |
| | | <u><u>\$1,555 89</u></u> |

Harrison avenue (westerly side), from Kneeland street to Harvard street. Length, 285 linear feet. Edgestone reset and artificial stone sidewalks constructed.

| | | |
|--|---------------|------------------------|
| Engineering | \$14 42 | |
| Inspection | 23 01 | |
| Engineering expense | 65 | |
| Advertising | 4 20 | |
| Amount paid to John McCourt Company, under contract: | | |
| 5,195 square feet artificial stone sidewalks furnished and laid @ 18c. | \$935 10 | |
| 29 square yards existing brick sidewalks relaid @ 30c. | 8 70 | |
| | <u>943 80</u> | |
| | | <u><u>\$986 08</u></u> |

* *Harrison avenue* (easterly side), from Stoughton street to East Concord street. Length, 306 linear feet. Edgestone was reset and artificial stone sidewalks constructed.

| | | |
|--|----------------|----------------|
| Engineering | \$6 27 | |
| Inspection | 14 00 | |
| Advertising | 1 50 | |
| Amount paid to Jeremiah J. Sullivan, under contract: | | |
| 229 linear feet existing edgestone reset @ 12c. | \$27 48 | |
| 2 square yards existing granite block paving relaid @ 40c. | 80 | |
| | <u>\$28 28</u> | |
| <i>Carried forward</i> | | <u>\$21 77</u> |

* Done in connection with East Concord and Stoughton streets.

| | | |
|--|-----------------|---------------|
| <i>Brought forward</i> | \$28 28 | \$21 77 |
| 1,962 square feet artificial stone sidewalks furnished and laid @ 15c. | 294 30 | |
| Extra work — Break out asphalt and concrete base and reset coal holes. | | |
| 18 hours' labor @ 30c. | 5 40 | |
| 2 hours, mason, @ 75c. | 1 50 | |
| 2 hours, helper, @ 31½c. | 63 | |
| Plus 15 per cent on \$7.53, | 1 13 | |
| | <u>331 24</u> | |
| | \$353 01 | |
| Credit: 12,100 old sidewalk bricks | 84 70 | |
| | <u>\$268 31</u> | |
| <i>Hastings street, from Centre street to Montview street. (Work not started.)</i> | | |
| Engineering expense | | <u>\$0 45</u> |
| <i>Haviland street, from Haviland terrace to 273 feet northerly. (Work not started.)</i> | | |
| Engineering | | <u>\$6 19</u> |
| <i>Holbrook street, from Centre street to Dane street. (Work not started.)</i> | | |
| Engineering expense | | <u>\$0 90</u> |
| <i>Holton street, from Everett street to Franklin street. (Work not started.)</i> | | |
| Engineering expense | | <u>\$0 50</u> |
| <i>Huntington avenue, at Christian Science Church Park.</i> | | |
| Engineering | \$17 84 | |
| Inspection | 33 24 | |
| Advertising | 2 25 | |
| Amount paid to William J. Rafferty & Co., under contract: | | |
| 180 linear feet existing edge- stone reset @ 15c. | \$27 00 | |
| 20 square yards existing brick sidewalks relaid @ 30c., | 6 00 | |
| 2,113 square feet artificial stone sidewalks furnished and laid @ 19c. | 401 47 | |
| | <u>434 47</u> | |
| | \$487 80 | |
| Credit: 10,500 old bricks | 73 50 | |
| | <u>\$414 30</u> | |
| <i>Magnolia square, from Magnolia street (Dorchester).</i> | | |
| Inspection | \$9 53 | |
| Engineering expense | 15 | |
| Amount paid John Kelly Company, under contract: | | |
| 752 square feet artificial stone sidewalks fur- nished and laid @ 14c. | 105 28 | |
| | <u>\$114 96</u> | |

PUBLIC WORKS DEPARTMENT.

197

Massachusetts avenue (easterly side), from Norway street to 67 feet northerly.

| | |
|-------------------------------|---------|
| Engineering | \$19 60 |
| Inspection | 3 50 |
| Engineering expense | 65 |
| Advertising | 93 |

Amount paid to V. Grande, under contract:

| | |
|--|----------|
| 1,016 square feet artificial stone sidewalks furnished and laid @ 24c. | \$243 84 |
| Less 15 per cent retained, | 36 58 |

207 26

\$231 94

Credit: 3,000 old sidewalk bricks 21 00

\$210 94

Medfield street, from Audubon road to St. Mary's street. (Work not started.)

| | |
|-------------------------------|--------|
| Engineering | \$6 02 |
| Engineering expense | 40 |

\$6 42

Norfolk avenue (westerly side), from Shirley street to Burrell street. (Work not started.)

Engineering \$29 20

Norway street (northerly side), from Massachusetts avenue to 113 feet easterly and southerly side at Christian Science Church Park.

| | |
|-------------------------------|---------|
| Engineering | \$26 97 |
| Inspection | 11 81 |
| Engineering expense | 90 |
| Advertising | 93 |

\$40 61

Amount paid to William J. Rafferty & Company, under contract:

| | |
|--|---------|
| 96 linear feet existing edgestone reset @ 15c | \$14 40 |
| 29 square yards existing granite block paving relaid @ 30c., | 8 70 |
| 721 square feet artificial stone sidewalks furnished and laid @ 19c. | 136 99 |

160 09

Amount paid V. Grande, under contract:

| | |
|--|----------|
| 662 square feet artificial stone sidewalks furnished and laid @ 24c. | \$158 88 |
| Less 15 per cent retained | 23 83 |

135 05

\$335 75

Credit: 5,800 old sidewalk bricks, \$40 60
180 old paving blocks 3 60

44 20

\$291 55

Penfield street, from Belgrade avenue to Birch street. (Work done in 1915.)

Engineering expense \$0 20

Amount paid Martino DeMatteo, under contract:

9,742 square feet artificial stone
sidewalks furnished and
laid @ 11½c. \$1,120 33

339 square feet artificial stone
driveways furnished and
laid @ \$1 339 00

Extra work — Excavate
rock:

9 days' labor @ \$2.25 20 25
Plus 15 per cent on \$20.25 3 04

\$1,482 62

Less amount paid in 1915 1,240 43

242 19

\$242 39

Poplar street, from Sycamore street to Brown avenue and Hilburn street.
Length, 1,766 linear feet. Area, 7,435 square yards. Edgestone set
and reset, granite block paving relaid, flagging crosswalks laid and
artificial stone sidewalks constructed. (Unfinished work from 1915.)

Engineering \$98 17

Inspection 82 51

Engineering expense 1 85

Edgestone, 364 feet straight, 43 feet 8 inches
circular and 2 large corners 318 60

Amount paid John Kelly Company, under
contract:

Removing trees, bushes, etc. \$150 00

20 cubic yards rock excava-
tion @ \$2 40 00

1,565 linear feet straight edge-
stone and corners
hauled and set @ 16c. 250 40

208 linear feet circular edge-
stone set @ 10c. 20 80

63 linear feet existing edge-
stone reset @ 10c. 6 30

802 linear feet crushed stone
and concrete founda-
tion furnished and
placed @ 10c. 80 20

12 square yards existing
granite block paving
relaid @ 25c. 3 00

2 square yards existing
flagging crosswalks re-
laid @ 50c. 1 00

15,252 square feet artificial stone
sidewalks furnished
and laid @ 13c. 1,982 76

289 square feet artificial stone
driveways furnished
and laid @ 13c. 37 57

1 cover reset @ \$3 3 00

Carried forward \$2,575 03

\$501 13

PUBLIC WORKS DEPARTMENT.

199

| | | |
|---|------------|----------|
| <i>Brought forward</i> | \$2,575 03 | \$501 13 |
| Extra work — Furnish and set edgestone as directed: | | |
| 641 feet 3-inch straight edgestone furnished and set @ 98c. | 628 43 | |
| Extra work — Remove edgestone already set and construct driveways as directed: | | |
| ½ day, foreman, @ \$5 | 2 50 | |
| ½ day, edgestone setter, @ \$5 | 2 50 | |
| 1½ days' labor @ \$2 | 3 00 | |
| Plus 15 per cent on \$8 | 1 20 | |
| 2 days, double team, @ \$6, | 12 00 | |
| Extra work — Remove stumps not shown on plan: | | |
| 1 day, foreman, @ \$5 | 5 00 | |
| 8½ days' labor @ \$2 | 17 00 | |
| ½ day's labor @ \$2.80 | 1 40 | |
| Plus 15 per cent on \$23.40 | 3 51 | |
| ½ day, steam roller, @ \$15, | 7 50 | |
| ½ day, double team, @ \$6 | 3 00 | |
| Extra work — Furnish lights at night as directed: | | |
| 53 nights, lights furnished @ \$2 | 106 00 | |
| Extra work—Grade roadway and sidewalks as directed: | | |
| 19½ days, foreman, @ \$5 | 97 50 | |
| 148 days' labor @ \$2 | 296 00 | |
| 18½ days' labor @ \$2.80 | 51 80 | |
| Plus 15 per cent on \$445.30 | 66 80 | |
| 45½ days, double team, @ \$6, | 272 50 | |
| 2 cords wood @ \$7.50 | 15 00 | |
| 43 gallons oil @ 11c. | 4 73 | |
| Sharpening tools | 8 60 | |
| Extra work — Extend the hauling and setting of straight edgestone and corners and setting circular edgestone and constructing artificial stone sidewalks to about 250 feet south of Brown avenue on east side and to about 200 feet south of Hilburn street on west side: | | |
| 408 linear feet straight edgestone and corners hauled and set @ 16c., | 65 28 | |
| 78 linear feet circular edgestone set @ 10c. | 7 80 | |
| <i>Carried forward</i> | \$4,254 08 | \$501 13 |

| | | |
|---|-------------------|--------------------------|
| <i>Brought forward</i> | \$4,254 08 | \$501 13 |
| 223 linear feet crushed stone and concrete founda- tion furnished and placed @ 10c. | 22 30 | |
| 2,967 square feet artificial stone sidewalks furnished and laid @ 13c. | 385 71 | |
| 8 cubic yards rock excava- tion @ \$2 | 16 00 | |
| | <u>\$4,677 09</u> | |
| Less amount paid in 1915, | <u>3,592 07</u> | |
| | | <u>1,085 02</u> |
| | | <u><u>\$1,586 15</u></u> |
| <i>Poplar street, from Washington street to Sycamore street. Length, 1,107 linear feet. Edgestone set and reset, flagging crosswalks laid, granite block gutters relaid and artificial stone sidewalks constructed.</i> | | |
| Engineering | | \$78 35 |
| Inspection | | 52 50 |
| Engineering expense | | 40 |
| Advertising | | 4 20 |
| Flagging, 16 feet | | 12 80 |
| Edgestone, 38 feet 11 inches circular, 2 large and 8 small corners | | 86 64 |
| | | <u>\$234 89</u> |
| Credit: Old granite blocks | \$20 00 | |
| Old granite edgestone | 25 23 | |
| | | <u>45 23</u> |
| | | <u>\$189 66</u> |
| <i>Amount paid to James Doherty, under con- tract:</i> | | |
| Removing trees, bushes, etc. | \$0 01 | |
| 2 cubic yards rock excava- tion @ \$5 | 10 00 | |
| 65 linear feet circular edge- stone set @ 15c. | 9 75 | |
| 370 linear feet existing edge- stone reset @ 13c. | 48 10 | |
| 127 square yards existing gran- ite block paving relaid @ 37c. | 46 99 | |
| 4 square yards existing flagging crosswalks re- laid @ 40c. | 1 60 | |
| 11,023 square feet artificial stone sidewalks furnished and laid @ 13c. | 1,432 99 | |
| 481 square feet artificial stone driveways furnished and laid @ 13c. | 62 53 | |
| Extra work — Furnish stonecutter to cut edge- stone on account of new driveway: | | |
| 2½ days, stonecutter, @ \$5, | 11 25 | |
| <i>Carried forward</i> | <u>\$1,623 22</u> | <u>\$189 66</u> |

PUBLIC WORKS DEPARTMENT.

201

| | | | |
|--|------------|----------|-------------------|
| <i>Brought forward</i> | \$1,623 22 | \$189 66 | |
| Plus 15 per cent on \$11.25 | 1 69 | | |
| | <hr/> | 1,624 91 | |
| | | | <u>\$1,814 57</u> |

Quincy street, from Coleman street to Barry street. (Work done in 1915.)

| | |
|-------------------------------|---------------|
| Engineering expense | <u>\$0 10</u> |
|-------------------------------|---------------|

Saratoga street, from Butler avenue to Washburn avenue. Length, 1,328 linear feet. Edgestone set, flagging crosswalks laid and artificial stone sidewalks constructed.

| | | |
|---|----------|-------------------|
| Engineering | \$125 16 | |
| Inspection | 217 59 | |
| Engineering expense | 4 75 | |
| Advertising | 4 20 | |
| Teaming | 2 50 | |
| Edgestone, 79 feet 2 inches circular, 6 small corners and 1,828 feet 6 inches straight | 1,620 72 | |
| Amount paid Agostino DeStefano, under con- tract: | | |
| 44 cubic yards water box ex- cavation @ 50c. | \$22 00 | |
| 1,871 linear feet straight edge- stone and corners hauled and set @ 11c., | 205 81 | |
| 81 linear feet circular edge- stone set @ 12c. | 9 72 | |
| 66 linear feet existing edge- stone reset @ 12c. | 7 92 | |
| 12 square yards existing granite block paving relaid @ 30c. | 3 60 | |
| 11 square yards existing flagging crosswalks re- laid @ 50c. | 5 50 | |
| 14,567 square feet artificial stone sidewalks fur- nished and laid @ 12c., | 1,748 04 | |
| 196 square feet artificial stone sidewalks fur- nished and laid @ 12c., | 23 52 | |
| | <hr/> | 2,026 11 |
| | | <u>\$4,001 03</u> |

Scotia street, from St. Cecilia street to Dalton street. (Work not started.)

| | | |
|-------------------------------|---------|----------------|
| Engineering expense | \$37 45 | |
| Advertising | 94 | |
| | <hr/> | <u>\$38 39</u> |

Shirley street (south side), from Clifton street to Norfolk avenue. (Work not started.)

| | | |
|-------------------------------|---------|----------------|
| Engineering | \$35 76 | |
| Inspection | 12 50 | |
| Engineering expense | 35 | |
| Advertising | 93 | |
| | <hr/> | <u>\$49 54</u> |

St. Cecilia street, from Boylston street to Belvidere street. (Work not started.)

| | | |
|-------------------------------|---------|----------------|
| Engineering | \$31 75 | |
| Engineering expense | 40 | |
| Advertising | 93 | |
| | | <u>\$33 08</u> |

* *Stoughton street* (southerly side), from Harrison avenue to 266 feet easterly. Length, 256 linear feet. Edgestone was reset, granite block gutters repaved and artificial stone sidewalks constructed.

| | | |
|---|---------|----------------|
| Engineering | \$15 59 | |
| Inspection | 56 00 | |
| Engineering expense | 50 | |
| Advertising | 1 50 | |
| Blocks | 4 50 | |
| | | <u>\$78 09</u> |
| Credit: 5,000 old sidewalk bricks | 35 00 | |
| | | <u>\$43 09</u> |

Amount paid Jeremiah J. Sullivan, under contract:

| | | |
|--|--------|-----------------|
| 59 linear feet existing edge-stone reset @ 12c. | \$7 08 | |
| 23 square yards granite block paving hauled and laid @ 80c. | 18 40 | |
| 6 square yards existing brick sidewalks relaid @ \$1 | 6 00 | |
| 1,988 square feet artificial stone sidewalks furnished and laid @ 15c. | 298 20 | |
| 116 square feet artificial stone driveways furnished and laid @ 15c. | 17 40 | |
| | | <u>347 08</u> |
| | | <u>\$390 17</u> |

Stoughton street (south side), from Stoughton place to No. 15. (Work not started.)

| | |
|-----------------------|---------------|
| Advertising | <u>\$0 93</u> |
|-----------------------|---------------|

Tremont street (east side), from Dover street to 89 feet northerly.

| | | |
|---|---------|----------------|
| Engineering | \$20 81 | |
| Inspection | 14 25 | |
| Engineering expense | 35 | |
| Advertising | 93 | |
| | | <u>\$36 34</u> |
| Credit: 3,000 old sidewalk bricks | 21 00 | |
| | | <u>\$15 34</u> |

Amount paid to V. Grande, under contract:

| | | |
|---|---------|---------|
| 97 linear feet existing edge-stone reset @ 25c. | \$24 25 | |
| Carried forward | \$24 25 | \$15 34 |

* Done in connection with East Concord street and Harrison avenue.

| | | | |
|--|----------|---------|-----------------|
| <i>Brought forward</i> | \$24 25 | \$15 34 | |
| 20 square yards existing granite block paving relaid, gravel joints, @ \$1 | 20 00 | | |
| 10 square yards existing brick sidewalks relaid @ 60c. | 6 00 | | |
| 1,024 square feet artificial stone sidewalks furnished and laid @ 24c. | 245 76 | | |
| | <hr/> | | |
| | \$296 01 | | |
| Less 15 per cent retained, | 44 40 | | |
| | <hr/> | 251 61 | |
| | | <hr/> | <u>\$266 95</u> |

Walk Hill street (west side), from Wachusett street to Bourne street. (Work done in 1915.)

| | |
|-------------------------------|---------------|
| Engineering expense | <u>\$0 20</u> |
|-------------------------------|---------------|

Washington street (Brighton), southerly side, from Tip Top street to Newton line, is about 1,325 linear feet in length. Artificial stone sidewalks constructed.

| | | |
|--|------------|-------------------|
| Engineering | \$91 41 | |
| Inspection | 100 81 | |
| Engineering expense | 1 60 | |
| Advertising | 4 20 | |
| Amount paid Agostino DeStefano, under contract: | | |
| 9,156 square feet artificial stone sidewalks furnished and laid @ 12c. | \$1,098 72 | |
| 593 square feet artificial stone driveways furnished and laid @ 15c. | 88 95 | |
| Extra work — Cut away embankment as directed: | | |
| 15 hours, foreman, @ 50c. | 7 50 | |
| 100 hours' labor @ 31½c. | 31 25 | |
| Plus 15 per cent on \$38.75, | 5 81 | |
| 15 hours, double team, @ 75c., | 11 25 | |
| | <hr/> | 1,243 48 |
| | | <hr/> |
| | | <u>\$1,441 50</u> |

* *Water street*, from Kilby street 202 feet easterly.

| | | |
|-----------------------|--------|----------------|
| Engineering | \$3 99 | |
| Inspection | 11 00 | |
| | <hr/> | <u>\$14 99</u> |

West Broadway, from Dorchester avenue to Dorchester street. (Work done in 1915.)

| | |
|-------------------------------|---------------|
| Engineering expense | <u>\$9 50</u> |
|-------------------------------|---------------|

* See "Reconstructing and Repairing Streets by Contract."

RECONSTRUCTING AND REPAIRING STREETS BY CONTRACT.

| | | |
|--|-------------|--------------------|
| Artificial stone sidewalks: | | |
| Rebates allowed to contractors | \$12,776 84 | |
| Repairs made | 1,240 71 | |
| New walks constructed | 489 91 | |
| | | <u>\$14,507 46</u> |
| Asphalt and bitulithic pavements repaired: | | |
| Engineering | \$1,288 21 | |
| Inspection | 537 50 | |
| Chemists' wages | 213 29 | |
| Engineering expense | 29 80 | |
| Amount paid to Central Construction Com- | | |
| pany, under contract: | | |
| Asphalt repairs | 32,263 67 | |
| Bitulithic repairs | 1,632 19 | |
| | | <u>\$35,964 66</u> |

Albany street, from Dover street to Northampton street. The contractor reset the edgestone, relaid the crosswalks, relaid the brick sidewalks and furnished and laid granite block pavement on a concrete base. (Work unfinished.)

| | |
|---|-------------------|
| Engineering | \$615 45 |
| Inspection | 418 89 |
| Engineering expense | 16 80 |
| Advertising | 2 05 |
| Bricks, 21,700 sidewalk | 184 90 |
| Edgestone, 267 feet 5 inches straight and 27 | |
| feet 8 inches circular | 538 07 |
| Flagging, 108 feet 5 inches granite | 86 74 |
| Lumber | 13 32 |
| Labor, making templets | 16 00 |
| Labor, handling stock | 5 63 |
| | <u>\$1,897 85</u> |

Amount paid B. E. Grant, under contract:

| | | |
|---|-----------|--------------------|
| 40 cubic yards filling furnished @ 5c. | \$2 00 | |
| 265 linear feet straight edgestone and corners hauled and set @ 20c., | 53 00 | |
| 170 linear feet circular edgestone set @ 16c. | 27 20 | |
| 4,380 linear feet existing edgestone reset @ 12c. | 525 60 | |
| 2,425 cubic yards concrete base furnished and laid @ \$5.05 | 12,246 25 | |
| 456 square yards existing granite block paving relaid, gravel joints, @ 50c. | 228 00 | |
| 3,500 square yards granite block pavement furnished and laid, grout joints (unfinished), @ 75c. | 2,625 00 | |
| | | <u>\$15,707 05</u> |
| <i>Carried forward</i> | | \$1,897 85 |

| | | |
|---|--------------------|---------------------------|
| <i>Brought forward</i> | \$15,707 05 | \$1,897 85 |
| 11,642 square yards granite block pavement furnished and laid, grout joints, @ \$3.28 | 38,185 76 | |
| 276 square yards existing granite block paving relaid, grout joints, @ 85c. | 234 60 | |
| 23 square yards flagging crosswalks hauled and laid, grout joints, @ 85c. | 19 55 | |
| 86 square yards existing flagging crosswalks relaid, grout joints, @ 80c. | 68 80 | |
| 765 square yards brick sidewalks laid @ 35c. | 267 75 | |
| 590 square yards existing brick sidewalks relaid @ 28c. | 165 20 | |
| 17,500 square feet artificial stone sidewalks furnished and laid (unfinished) @ 12c. | 2,100 00 | |
| | <u>\$56,748 71</u> | |
| Less 5 per cent retained, | 2,837 45 | |
| | | <u>53,911 26</u> |
| | | \$55,809 11 |
| Credit: 190,960 old granite blocks | | <u>3,819 20</u> |
| | | <u><u>\$51,989 91</u></u> |

Albany street, from Kneeland street to Boston & Albany Railroad bridge.
(Work not started.)

| | |
|-------------------------------|----------------|
| Engineering | \$73 23 |
| Engineering expense | 60 |
| Advertising | 2 05 |
| | <u>\$75 88</u> |

Appleton street, from Berkeley street to Columbus avenue. Length, 1,400 linear feet. Area, 6,562 square yards. The contractor reset the edgestone, relaid the brick sidewalks, furnished and laid brick block gutters on a concrete base and laid an asphalt wearing surface on the existing macadam base.

| | |
|---|-----------------|
| Engineering | \$232 91 |
| Inspection | 81 00 |
| Engineering expense | 4 60 |
| Advertising | 1 32 |
| Printing | 78 |
| Bricks, 9,500 sidewalk | 66 50 |
| Edgestone, 37 feet 9½ inches circular | 47 41 |
| Amount paid Warren Brothers Company, under contract: | |
| 38 linear feet circular edgestone set @ 17c. | \$6 46 |
| 1,538 linear feet existing edgestone reset @ 15c. | 230 70 |
| | <u>\$237 16</u> |
| <i>Carried forward</i> | \$434 52 |

| | | |
|--|-------------------|--------------------------|
| <i>Brought forward</i> | \$237 16 | \$434 52 |
| 245 square yards existing granite block paving relaid, gravel joints, @ 53c. | 129 85 | |
| 59 square yards existing flagging crosswalks relaid, gravel joints, @ 50c. | 29 50 | |
| 5,471 square yards bituminous concrete binder and asphalt wearing surface furnished and laid on macadam surface @ \$1.21 | 6,619 91 | |
| 787 square yards concrete base and brick block pavement furnished and laid @ \$2.83 | 2,227 21 | |
| 1,257 square yards existing brick sidewalks relaid @ 30c. | 377 10 | |
| 14 covers reset @ \$3 | 42 00 | |
| Extra work—Relay brick sidewalks with herringbone work: | | |
| 325 square yards herringbone sidewalk relaid @ 60c. | 195 00 | |
| Extra work—Furnish stonecutter to trim edgestone: | | |
| 10 hours, stonecutter, @ 62½c. | 6 25 | |
| Plus 15 per cent on \$6.25, | 94 | |
| Extra work—Haul sidewalk brick from Codman street yard: | | |
| 45 hours, double team, @ 75c., | 33 75 | |
| | <u>\$9,898 67</u> | |
| Less 5 per cent retained . | 494 93 | |
| | | <u>9,403 74</u> |
| | | <u>\$9,838 26</u> |
| Credit: Old blocks, 40,025 | \$800 50 | |
| Old flagging | 20 00 | |
| Old edgestone | 3 60 | |
| | | <u>824 10</u> |
| | | <u><u>\$9,014 16</u></u> |

Batterymarch street, from Franklin street to Broad street. Length, 287 linear feet. Area, 1,108 square yards. The contractor reset the edgestone, relaid the brick sidewalks and furnished and laid a granite block pavement on a concrete base with grout joints.

| | |
|----------------------------------|-----------------|
| Engineering | \$121 52 |
| Inspection | 129 50 |
| Engineering expense | 45 |
| Advertising | 2 04 |
| Teaming | 2 50 |
| Labor, handling stock | 67 |
| <i>Carried forward</i> | <u>\$256 68</u> |

| | | | |
|--|---------------------|-------------------|--|
| <i>Brought forward</i> | | \$256 68 | |
| Edgestone, 18 feet circular, 21 corners | | 31 03 | |
| Flagging, 38 feet 1 inch granite | | 30 47 | |
| Bricks, 8,000 sidewalk | | 100 00 | |
| Lumber | | 5 66 | |
| Labor, making templets | | 8 25 | |
| Amount paid B. E. Grant, under contract: | | | |
| 19 linear feet circular edge-stone set @ 16c. | \$3 04 | | |
| 347 linear feet existing edge-stone reset @ 12c. | 41 64 | | |
| 181.3 cubic yards concrete base furnished and laid @ \$5.05. | 915 57 | | |
| 37 square yards existing granite block paving relaid, gravel joints, @ 50c. | 18 50 | | |
| 1,051 square yards granite block paving furnished and laid, grout joints, @ \$3.28 | 3,447 28 | | |
| 8 square yards flagging crosswalks hauled and laid, grout joints, @ 85c., | 6 80 | | |
| 49 square yards existing flagging crosswalks relaid, grout joints, @ 80c., | 39 20 | | |
| 250 square yards existing brick sidewalks relaid @ 28c. | 70 00 | | |
| | <u>\$4,542 03</u> | | |
| Less 5 per cent retained | 227 10 | | |
| | | <u>4,314 93</u> | |
| | | <u>\$4,747 02</u> | |
| Credit: Old blocks, 30,010 | \$600 20 | | |
| Old bricks, 2,825 | 19 75 | | |
| | | <u>619 95</u> | |
| | | <u>4,127 07</u> | |
| <i>Beach street, from Harrison avenue to Atlantic avenue.</i> | (Work not started.) | | |
| Engineering | \$15 11 | | |
| Engineering expense | 10 | | |
| Advertising | 2 04 | | |
| | | <u>\$17 25</u> | |
| <i>Blossom street, from Allen street to Fruit street.</i> | (Work not started.) | | |
| Engineering | \$51 00 | | |
| Printing | 78 | | |
| Advertising | 1 32 | | |
| | | <u>\$53 10</u> | |
| <i>Boylston street, from Tremont street to Washington street.</i> | (Work not started.) | | |
| Engineering | \$66 18 | | |
| Engineering expense | 75 | | |
| Advertising | 1 32 | | |
| | | <u>\$68 25</u> | |

Canal street, from Haymarket square to Causeway street. The work done this year consisted of removing the existing granite block. (Work unfinished.)

| | |
|---|----------|
| Engineering | \$167 55 |
| Inspection | 42 25 |
| Engineering expense | 15 |
| Advertising | 2 04 |
| Labor, department force, repairing walk | 63 50 |

\$275 49

Credit: Old flagging 9 36

\$266 13

Amount paid to B. E. Grant, under contract:
Extra work — Omit the relaying of granite block paving and substitute the furnishing and laying of new granite block:

| | |
|---|----------|
| 1,300 square yards granite block paving furnished and laid, grout joints (unfinished), @ 35c. | \$455 00 |
| Less 5 per cent retained | 21 75 |

432 25

\$698 38

Chandler street, from Berkeley street to Columbus avenue. Length, 1,105 linear feet. Area, 5,016 square yards. The contractor set the edgestone, relaid the brick sidewalks, paved the gutters with brick block on a concrete base and laid an asphalt wearing surface on the existing macadam roadway.

| | |
|---|----------|
| Engineering | \$191 25 |
| Inspection | 53 00 |
| Engineering expense | 3 10 |
| Advertising | 1 32 |
| Bricks, 15,350 second-hand | 107 45 |
| Printing | 78 |
| Edgestone, 28 feet 11 inches circular | 35 60 |

Amount paid to Warren Brothers Company, under contract:

| | |
|--|----------|
| 29 linear feet circular edgestone set @ 17c. | \$4 93 |
| 1,954 linear feet existing edgestone reset @ 15c. | 293 10 |
| 28 square yards existing granite block paving relaid, gravel joints, @ 53c. | 14 84 |
| 19 square yards existing flagging crosswalks relaid, gravel joints, @ 50c. | 9 50 |
| 4,379 square yards bituminous concrete binder and asphalt wearing surface furnished and laid, macadam foundation, @ \$1.21 | 5,298 59 |

Carried forward \$5,620 96 \$392 50

| | | |
|--|-------------------|--------------------------|
| <i>Brought forward</i> | \$5,620 96 | \$392 50 |
| 590 square yards concrete base and brick block paving furnished and laid @ \$2.83 | 1,669 70 | |
| 2,105 square yards existing brick sidewalks relaid @ 30c. | 631 50 | |
| 16 covers reset @ \$3 | 48 00 | |
| Extra work — Relay brick sidewalks with herring- bone work: | | |
| 28 square yards herringbone sidewalks relaid @ 60c., | 16 80 | |
| | <u>\$7,986 96</u> | |
| Less 5 per cent retained | 399 34 | |
| | | <u>7,587 62</u> |
| | | <u>\$7,980 12</u> |
| Credit: Blocks, 25,550 old gran- ite | \$511 00 | |
| Flagging, old North River | 122 84 | |
| | | <u>633 84</u> |
| | | <u><u>\$7,346 28</u></u> |
| <i>Clinton street, from Merchants row to Commercial street. (Work not started.)</i> | | |
| Engineering | | \$88 85 |
| Advertising | | 2 04 |
| | | <u>\$90 89</u> |
| <i>Columbia road, from Edward Everett square to Dudley street. Length, 1,460 linear feet. Area, 4,867 square yards. The contractor reset part of the edgestone and relaid the brick sidewalks. The roadway as constructed is of granite block pavement with grout joints on a concrete base.</i> | | |
| Engineering | | \$409 64 |
| Inspection | | 297 45 |
| Engineering expense | | 13 30 |
| Advertising | | 2 05 |
| Labor, making templets | | 5 50 |
| Labor, handling stock | | 2 87 |
| Lumber | | 1 80 |
| Bricks, 11,500 second-hand | | 97 00 |
| Edgestone, 165 feet straight, 2 large and 2 small corners | | 134 80 |
| Amount paid to B. E. Grant, under contract: | | |
| 170 linear feet straight edge- stone and corners hauled and set @ 20c. | \$34 00 | |
| 500 linear feet existing edge- stone reset @ 12c. | 60 00 | |
| 500 cubic yards concrete base furnished and laid @ \$5.05 | 2,525 00 | |
| 22 square yards existing gran- ite block paving relaid, gravel joints, @ 50c. | 11 00 | |
| | <u>\$2,630 00</u> | |
| <i>Carried forward</i> | | <u>\$964 41</u> |

| | | |
|--|--------------------|---------------------------|
| <i>Brought forward</i> | \$2,630 00 | \$964 41 |
| 400 square yards existing granite block paving relaid, grout joints, @ 85c. | 340 00 | |
| 4,425 square yards granite block paving furnished and laid, grout joints, @ \$3.30 | 14,602 50 | |
| 26 square yards existing flagging crosswalks relaid, gravel joints, @ 50c. | 13 00 | |
| 2 square yards flagging crosswalks hauled and laid, grout joints, @ 85c. | 1 70 | |
| 421 square yards existing brick sidewalks relaid @ 28c. | 117 88 | |
| 3 covers reset @ \$3 | 9 00 | |
| Extra work — Remove existing Telford base and furnish and lay a 4-inch concrete base: | | |
| 154 hours, foreman, @ 75c. | 115 50 | |
| 3,163 hours' labor @ 30c | 948 90 | |
| Plus 15 per cent on \$1,064.40 | 159 66 | |
| 702 hours, double team, @ 75c. | 526 50 | |
| 8 hours, steam roller, @ \$1.87½ | 15 00 | |
| 5 hours, auto truck, @ \$2.50, | 12 50 | |
| | <u>\$19,492 14</u> | |
| Less 5 per cent retained | 974 61 | |
| | | 18,517 53 |
| | | <u>\$19,481 94</u> |
| Credit: Blocks, 12,980 old granite | \$259 60 | |
| Flagging, old North River | 23 53 | |
| | | 283 13 |
| | | <u><u>\$19,198 81</u></u> |
| <i>Cross street</i> , from Commercial street to Haymarket square. (Work not started.) | | |
| Engineering | \$156 28 | |
| Advertising | 2 04 | |
| | | <u><u>\$158 32</u></u> |
| <i>Dearborn street</i> , from Albany street to Dudley street. The contractor reset the edgestone, furnished and laid brick block gutters and furnished and laid an asphalt pavement on a concrete base (unfinished). | | |
| Engineering | \$211 61 | |
| Inspection | 46 75 | |
| Engineering expense | 4 75 | |
| Advertising | 1 32 | |
| Edgestone, 5 feet 1 inch straight and 1 small corner | 7 31 | |
| Labor, handling stock | 13 | |
| | | <u><u>\$271 87</u></u> |
| <i>Carried forward</i> | | |

| | | |
|--|------------|-------------------|
| <i>Brought forward</i> | | \$271 87 |
| Amount paid to Warren Brothers Company, under contract: | | |
| 7 linear feet straight edge- stone hauled and set @ 20c. | \$1 40 | |
| 340 linear feet existing edge- stone reset @ 15c. | 51 00 | |
| 15 square yards existing gran- ite block paving relaid, gravel joints, @ 53c. | 7 95 | |
| 1,160 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$2.09 | 2,424 40 | |
| 190 square yards concrete base, brick block pave- ment furnished and laid @ \$2.83 | 537 70 | |
| | <hr/> | |
| | \$3,022 45 | |
| Less 5 per cent retained | 151 12 | |
| | <hr/> | |
| | | 2,871 33 |
| | | <hr/> |
| | | \$3,143 20 |
| | | 60 24 |
| Credit: Flagging, old North River | | <hr/> |
| | | <u>\$3,082 96</u> |

Devonshire street, from Adams square to Water street. Length, 696 linear feet. Area, 2,032 square yards. The contractor did the excavating, reset the edgestone, relaid the brick sidewalks and furnished and laid a wood block pavement on a concrete base.

| | |
|---|------------|
| Engineering | \$256 19 |
| Inspection | 149 20 |
| Engineering expense | 65 |
| Advertising | 2 04 |
| Lumber, templets | 4 99 |
| Labor, making templets | 13 00 |
| Bricks, 3,500 sidewalk | 35 50 |
| Teaming | 2 50 |
| Amount paid B. E. Grant, under contract: | |
| 192 linear feet existing edge- stone reset @ 12c. | \$23 04 |
| 313½ cubic yards concrete base furnished and laid @ \$5.05 | 1,583 18 |
| 57 square yards existing granite block paving re- laid, gravel joints, @ 50c. | 28 50 |
| 119 square yards granite block paving furnished and laid, asphalt joints, @ \$3.40 | 404 60 |
| 10 square yards existing flag- ging crosswalks relaid, gravel joints, @ 50c. | 5 00 |
| 120 square yards existing brick sidewalks relaid at 28c., | 36 12 |
| | <hr/> |
| <i>Carried forward</i> | \$2,080 44 |
| | <hr/> |
| | \$464 07 |

| | | |
|--|-------------------|--------------------------|
| <i>Brought forward</i> | \$2,080 44 | \$464 07 |
| Extra work — Omit granite block pavement and substitute wood block pavement: | | |
| 1,913 square yards wood block pavement furnished and laid @ \$3.28 | 6,274 64 | |
| | <u>\$8,355 08</u> | |
| Less 5 per cent retained | 417 75 | |
| | | <u>7,937 33</u> |
| | | \$8,401 40 |
| Credit: Bricks, 1,000 old sidewalk | \$7 00 | |
| Flagging, 306 feet old granite | 122 52 | |
| | | <u>129 52</u> |
| | | <u><u>\$8,271 88</u></u> |

Dorchester avenue, from Savin Hill avenue to Freeport street. (Work started, but no payment made to contractor.)

| | | |
|---------------------------------------|----------|-----------------|
| Engineering | \$191 41 | |
| Inspection | 83 00 | |
| Engineering expense | 4 95 | |
| Labor, making templates | 5 50 | |
| Labor, stonecutter | 42 00 | |
| Blocks: Old granite, 15,900 | 318 00 | |
| Teaming | 1 25 | |
| Advertising | 2 05 | |
| Labor, sidewalk repairs | 3 00 | |
| | | <u>\$651 16</u> |

Fruit street, from Charles street to Blossom street. (Work not started.)

| | | |
|-------------------------------|---------|----------------|
| Engineering | \$96 04 | |
| Engineering expense | 65 | |
| Advertising | 1 30 | |
| Printing | 77 | |
| | | <u>\$98 76</u> |

Fulton street, from Blackstone street to Richmond street. (Work not started.)

| | | |
|-----------------------|---------|----------------|
| Engineering | \$62 26 | |
| Advertising | 2 04 | |
| | | <u>\$64 30</u> |

Harrison avenue, from Kneeland street to Dover street. (Work not started.)

| | | |
|-------------------------------|----------|-----------------|
| Engineering | \$428 93 | |
| Engineering expense | 2 70 | |
| Advertising | 2 04 | |
| | | <u>\$433 67</u> |

Haymarket square, intersection of Washington, Cross, Canal, Blackstone, Sudbury and other streets. (Work not started.)

| | | |
|-----------------------|----------|-----------------|
| Engineering | \$174 93 | |
| Advertising | 2 04 | |
| | | <u>\$176 97</u> |

Lincoln street, from Essex street to Beach street. (Work not started.)

| | | |
|-----------------------|---------|----------------|
| Engineering | \$71 92 | |
| Advertising | 2 04 | |
| | | <u>\$73 96</u> |

McKinley square. (Work not started.)

| | | |
|-----------------------|----------|-----------------|
| Engineering | \$165 78 | |
| Advertising | 2 05 | |
| | | <u>\$167 83</u> |

Mercantile street, from South Market street to Richmond street. (Work not started.)

| | | |
|-----------------------|---------|----------------|
| Engineering | \$93 29 | |
| Advertising | 2 05 | |
| | | <u>\$95 34</u> |

North Anderson street, from Parkman street to Fruit street. The contractor reset the edgestone, relaid the brick sidewalks, furnished and laid brick block gutters on a concrete base and furnished and laid asphalt wearing surface on a concrete base. (Work unfinished.)

| | | |
|--|-----------------|-----------------|
| Engineering | \$29 70 | |
| Inspection | 30 25 | |
| Engineering expense | 25 | |
| Advertising | 1 30 | |
| Printing | 77 | |
| Edgestone | 19 74 | |
| Teaming | 3 75 | |
| Lumber | 4 48 | |
| Labor, making templets | 6 00 | |
| Amount paid to Warren Brothers Company, under contract: | | |
| 22 linear feet circular edgestone set @ 17c. | \$3 74 | |
| 12 linear feet existing edgestone reset @ 15c. | 1 80 | |
| 3 square yards existing granite block paving relaid, gravel joints, @ 53c. | 1 59 | |
| 171 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$2.09 | 357 39 | |
| 43 square yards concrete base and brick block pavement furnished and laid @ \$2.83 | 121 69 | |
| | <u>\$486 21</u> | |
| Less 5 per cent retained | 24 31 | |
| | <u>461 90</u> | |
| | | <u>\$558 14</u> |

North Grove street, from Cambridge street to Fruit street. (Work not started.)

| | | |
|-------------------------------|---------|----------------|
| Engineering | \$88 15 | |
| Engineering expense | 75 | |
| Advertising | 1 30 | |
| Printing | 77 | |
| | | <u>\$90 97</u> |

Parkman street, from North Anderson street to North Grove street. The contractor reset the edgestone, furnished and laid brick block gutters on a concrete base and furnished and laid an asphalt pavement on a concrete base.

| | |
|---|-------------------|
| Engineering | \$48 85 |
| Inspection | 30 25 |
| Engineering expense | 45 |
| Advertising | 1 30 |
| Lumber | 4 20 |
| Teaming | 1 25 |
| Edgestone | 24 94 |
| Labor, making templets | 6 00 |
| Printing | 77 |
| Amount paid Warren Brothers Company, under contract: | |
| 20 linear feet circular edge- stone set @ 17c. | \$3 40 |
| 80 linear feet existing edge- stone reset @ 15c. | 12 00 |
| 3 square yards existing gran- ite block pavement re- laid, gravel joints, @ 53c., | 1 59 |
| 4 square yards existing gran- ite block pavement re- laid, grout joints, includ- ing concrete base, @ \$2, | 8 00 |
| 3 square yards existing flag- ging crosswalks relaid, gravel joints, @ 50c. | 1 50 |
| 6 square yards existing gran- ite flagging crosswalks relaid, grout joints, in- cluding concrete base, @ \$1.80 | 10 80 |
| 376 square yards concrete base, bituminous concrete bind- er and asphalt wearing surface furnished and laid @ \$2.09 | 785 84 |
| 19 square yards bituminous concrete binder and as- phalt wearing surface fur- nished and laid on mac- adam foundation @ \$1.21, | 22 99 |
| 100 square yards concrete base and brick block pave- ment furnished and laid @ \$2.83 | 283 00 |
| 1 cover reset @ \$3 | 3 00 |
| | <hr/> |
| | \$1,132 12 |
| Less 5 per cent retained | 56 62 |
| | <hr/> |
| | 1,075 50 |
| | <hr/> |
| | <u>\$1,193 51</u> |

School street, from Washington street to Tremont street. Length, 570 linear feet. Area, 1,385 square yards. The edgestone, crosswalks and sidewalks were regulated where necessary. The roadway as constructed is of granite block pavement on a concrete base.

| | |
|---------------------------|----------|
| Engineering | \$164 44 |
| Inspection | 88 00 |
| Carried forward | <hr/> |
| | \$252 44 |

| | | | |
|--|------------|----------|-------------------|
| <i>Brought forward</i> | | \$252 44 | |
| Engineering expense | | 30 | |
| Advertising | | 2 05 | |
| Labor, making templets | | 11 10 | |
| Lumber | | 3 11 | |
| Teaming | | 2 50 | |
| Amount paid B. E. Grant, under contract: | | | |
| 75 linear feet existing edge-stone reset @ 12c. | \$9 00 | | |
| 219.7 cubic yards concrete base furnished and laid @ \$5.05 | | 1,109 49 | |
| 1,331 square yards granite block paving furnished and laid, grout joints, @ \$3.28 | | 4,365 68 | |
| 36 square yards existing granite block paving relaid, grout joints, @ 85c. | | 30 60 | |
| 18 square yards existing flagging crosswalks relaid, grout joints, @80c., | | 14 40 | |
| | \$5,529 17 | | |
| Less 5 per cent retained | 276 45 | | |
| | | 5,252 72 | |
| | | | <u>\$5,524 22</u> |

Wachusett street, from Weld Hill street to Barlow street. Length, 399 linear feet. The street was excavated and graded.

| | | | |
|--|--|----------|-----------------|
| Amount paid John Landis, under contract: | | | |
| 494 cubic yards earth excavation @ 65c. | | \$321 10 | |
| 145 cubic yards rock excavation @ \$3 | | 435 00 | |
| | | | <u>\$756 10</u> |

Washington street, from Haymarket square to Elm street. (Work not started.)

| | | | |
|-------------|----------|--|-----------------|
| Engineering | \$137 67 | | |
| Advertising | 2 05 | | |
| | | | <u>\$139 72</u> |

* *Water street*, from Kilby street 202 feet easterly. Artificial stone walk laid and repaired.

| | | | |
|--|--|---------|-----------------|
| Amount paid to C. J. Jacobs & Co., extra work, breaking out slabs: | | | |
| 489 square feet artificial stone walks @ 20c., | | \$97 80 | |
| 224 square feet artificial stone walks @ 60c., | | 134 40 | |
| 484 square feet artificial stone walks @ 25c., | | 121 00 | |
| 617 square feet artificial stone walks @ 5c., | | 30 85 | |
| | | | <u>\$384 05</u> |

West Broadway, from Dorchester avenue across E street. (Work not started.)

| | | | |
|---------------------|----------|--|-----------------|
| Engineering | \$131 79 | | |
| Engineering expense | 30 | | |
| Advertising | 1 30 | | |
| Printing | 77 | | |
| | | | <u>\$134 16</u> |

* See granolithic sidewalks.

West Canton street, from Appleton street to Tremont street. Length, 900 linear feet. Area, 3,306 square yards. This was a macadam street with granite block gutters; the latter were replaced with brick block gutters 30 inches wide laid on a 6-inch concrete base. The roadway of the street was constructed with asphalt wearing surface on the existing macadam base.

| | |
|--|------------|
| Engineering | \$211 47 |
| Inspection | 93 02 |
| Engineering expense | 4 50 |
| Advertising | 1 30 |
| Bricks, 8,150 second-hand sidewalk | 57 05 |
| Blocks, 4,325 wood blocks | 211 93 |
| Printing | 77 |
| Edgestone, 37 feet circular | 44 63 |
| Teaming | 27 80 |
| Amount paid to Warren Brothers Company, under contract: | |
| 35 linear feet circular edge- stone set @ 17c. | \$5 95 |
| 1,500 linear feet existing edge- stone reset @ 15c. | 225 00 |
| 112 square yards existing gran- ite block paving relaid, gravel joints, @ 53c. | 59 36 |
| 65 square yards existing flag- ging crosswalks relaid, gravel joints, @ 50c. | 32 50 |
| 2,709 square yards bituminous concrete binder and asphalt wearing surface furnished and laid on macadam foundation @ \$1.21 | 3,277 89 |
| 465 square yards concrete base, brick block pavement furnished and laid @ \$2.83 | 1,315 95 |
| 1,300 square yards existing brick sidewalks relaid @ 30c., | 390 00 |
| 12 covers reset @ \$3 | 36 00 |
| Extra work — Relay brick sidewalks with herring- bone work: | |
| 62 square yards herringbone sidewalk relaid @ 60c., | 37 20 |
| Extra work — Relay wood block pavement at inter- section of West Canton street and Warren avenue: | |
| 5 cubic yards concrete base furnished and laid @ \$6.50 | 32 50 |
| 314 square yards wood block pavement relaid @ 60c., | 188 40 |
| | <hr/> |
| | \$5,600 75 |
| Less 5 per cent retained | 280 04 |
| | <hr/> |
| | 5,320 71 |
| <i>Carried forward</i> | <hr/> |
| | \$5,973 18 |

| | | | |
|------------------------------------|----------|------------|-------------------|
| <i>Brought forward</i> | | \$5,973 18 | |
| Credit: Blocks, 22,104 old granite | \$442 08 | | |
| Flagging, 247 feet old North River | 98 82 | | |
| | | 540 90 | |
| | | | <u>\$5,432 28</u> |

STREETS CONSTRUCTED OR IN PROCESS OF CONSTRUCTION UNDER CHAPTER 393 OF THE ACTS OF 1906, AND THE COST CHARGED TO THE APPROPRIATION FOR HIGHWAYS, MAKING OF.

Ainsworth street footway, from Tyndale street to Belgrade avenue. Constructed footway under railroad tracks.

| | | |
|--|------------|-------------------|
| Engineering | \$579 92 | |
| Inspection | 422 50 | |
| Engineering expense | 1 25 | |
| Advertising | 9 00 | |
| Printing | 43 29 | |
| Amount paid to Charles J. Jacobs Company, under contract: | | |
| 2½ cubic yards rock excavation @ \$4 | \$10 00 | |
| Contract price | 647 00 | |
| Contract price | 5,173 75 | |
| Extra work under order dated July 21, 1916 — | | |
| Excavation under railroad tracks: | | |
| 3 days, foreman, @ \$5 | 15 00 | |
| 189 hours, men, @ 37½c. | 70 88 | |
| 6 days, double team, @ \$6 | 36 00 | |
| Extra work under order dated August 21, 1916: | | |
| 6 hours, cutting keyways, @ 37½c. | 2 25 | |
| 2 cubic yards concrete side walls, Tyndale street approach, @ \$15 | 30 00 | |
| 2 iron posts for railings * @ \$3.50 | 7 00 | |
| Extra work under order dated September 27, 1916 — | | |
| Overhanging coping on side walls: | | |
| 300 linear feet corner molding @ 2c. | 6 00 | |
| 3 days, carpenter work, @ \$4.80 | 14 40 | |
| 2 days, finishers' work, @ \$5, | 10 00 | |
| 8 cubic feet extra concrete @ 65c. | 5 20 | |
| Add 15 per cent on labor (\$112.53) | 16 88 | |
| | \$6,044 36 | |
| Less 5 per cent retained | 302 22 | |
| | 5,742 14 | |
| | | <u>\$6,798 10</u> |

* Per verbal agreement.

Alexander street, from Bird street about 527 feet northerly. Length, 527 linear feet. Area, 1,588 square yards. The contractor set the edge-stone and constructed granite block roadway on a concrete base. Artificial stone sidewalks are to be constructed. (Work unfinished.)

| | |
|---|------------|
| Engineering | \$269 08 |
| Inspection | 234 95 |
| Engineering expense | 6 15 |
| Advertising | 8 70 |
| Lumber | 1 82 |
| Blocks | 7 00 |
| Edgestone, 525 feet 9 inches straight, 6 small corners, 65 feet 3 inches circular | 482 57 |
| Flagging, 131 feet 10 inches granite | 105 53 |
| Crushed stone, 98.2 tons | 100 17 |
| Labor, making templets | 15 00 |
| Labor, handling stock | 14 15 |
| Labor, spreading stone | 81 75 |
| Teaming | 77 50 |
| Amount paid to James Doherty, under contract: | |
| 1,200 cubic yards earth excavation @ 60c. | \$720 00 |
| 41 cubic yards water box excavation @ \$1 | 41 00 |
| 34 cubic yards rock excavation @ \$5.50 | 187 00 |
| 545 linear feet straight edge-stone and corners hauled and set @ 18c. | 98 10 |
| 67 linear feet circular edge-stone set @ 13c. | 8 71 |
| 163 linear feet existing edge-stone reset @ 12c. | 19 56 |
| 12 square yards granite block paving hauled and laid, gravel joints, @ 55c. | 6 60 |
| 13 square yards existing granite block paving relaid, gravel joints, @ 40c. | 5 20 |
| 1,818 square yards granite block paving furnished and laid, grout joints, including concrete base, @ \$3.25 | 5,908 50 |
| 28 square yards flagging crosswalks hauled and laid, grout joints, including concrete base, @ \$1.65 | 46 20 |
| 3,000 square feet artificial stone sidewalks furnished and laid (unfinished) @ 7c., | 210 00 |
| 100 square feet artificial stone driveways furnished and laid (unfinished) @ 8c., | 8 00 |
| | <hr/> |
| | \$7,258 87 |
| Less 15 per cent retained, | 1,088 83 |
| | <hr/> |

6,170 04

\$7,574 41

- * *Amory street*, from Centre street to Bragdon street. Length, 1,408 linear feet. Area, 5,792 square yards. Edgestone set and roadway subgraded. (Work unfinished.)

| | |
|--|----------|
| Engineering | \$300 31 |
| Inspection | 181 20 |
| Engineering expense | 4 10 |
| Advertising | 9 09 |
| Labor, handling stock | 22 24 |
| Edgestone, 1,482 feet 10 inches straight and 323 feet 7 inches circular | 1,467 27 |

\$1,984 21

Credit: Blocks, 7,769 old granite 155 38

\$1,828 83

Amount paid to James Doherty, under contract:

| | |
|--|----------|
| 1,500 cubic yards earth excavation @ 66½c. | \$997 50 |
| 76 cubic yards rock excavation @ \$5.50 | 418 00 |
| 1,100 linear feet straight edgestone and corners hauled and set @ 18c. | 198 00 |
| 260 linear feet circular edgestone set @ 13c. | 33 80 |

\$1,647 30

Less 15 per cent retained, 247 10

1,400 20

\$3,229 03

- Ardent street*, from Belgrade avenue to Colberg avenue. Edgestone set, artificial stone sidewalks laid and asphalt roadway constructed.

| | |
|-----------------------------------|---------|
| Engineering | \$40 03 |
| Inspection | 102 00 |
| Engineering expense | 90 |
| Teaming | 294 61 |
| Lumber | 2 55 |
| Labor, making templates | 5 00 |
| Labor, chemist | 5 12 |

Amount paid to Central Construction Company, under contract:

| | |
|---|----------|
| 120 cubic yards earth excavation @ 55c. | \$66 00 |
| 12 square yards existing granite block paving relaid, grout joints, including concrete base, @ \$1.25 | 15 00 |
| 17 square yards existing flagging crosswalks relaid, grout joints, including concrete base, @ \$1.25 | 21 25 |
| 840 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$1.58, | 1,327 20 |

Carried forward \$1,429 45 \$450 21

* Done in connection with Washington street.

| | | |
|---|------------|-------------------|
| <i>Brought forward</i> | \$1,429 45 | \$450 21 |
| 3,200 square feet artificial stone sidewalks furnished and laid @ 11½c. | 376 00 | |
| 4 covers reset @ \$3 | 12 00 | |
| | <hr/> | |
| | \$1,817 45 | |
| Less 15 per cent retained, | 272 62 | |
| | <hr/> | 1,544 83 |
| | | <hr/> |
| | | \$1,995 04 |
| Credit: Blocks, old granite | \$4 30 | |
| Flagging | 5 49 | |
| | <hr/> | 9 79 |
| | | <hr/> |
| | | <u>\$1,985 25</u> |

Atkins street, from Washington street to 609 feet northeasterly. (Work on contract not started.)

| | |
|------------------------|-----------------|
| Engineering | \$113 17 |
| Engineering expense | 50 |
| Advertising | 4 60 |
| Lumber | 94 86 |
| Labor, spreading stone | 2 50 |
| | <hr/> |
| | <u>\$215 63</u> |

Augustus avenue, from Metropolitan avenue to Ethel street. Edgestone set and roadway rough graded. (Work unfinished.)

| | |
|---|-------------------|
| Engineering | \$71 09 |
| Inspection | 62 32 |
| Engineering expense | 2 15 |
| Advertising | 7 28 |
| Labor, handling stock | 8 99 |
| Edgestone, 600 feet 1 inch straight and 176 feet circular | 654 30 |
| Amount paid Martino DeMatteo, under contract: | |
| 500 cubic yards earth excavation @ 75c. | \$375 00 |
| 600 linear feet straight edgestone and corners hauled and set @ 25c., | 150 00 |
| 136 linear feet circular edgestone set @ 12c. | 16 32 |
| 30 linear feet existing edgestone reset @ 13c. | 3 90 |
| 375 linear feet crushed stone and concrete foundation furnished and placed @ 14c. | 52 50 |
| | <hr/> |
| | \$597 72 |
| Less 15 per cent retained, | 89 66 |
| | <hr/> |
| | 508 06 |
| | <hr/> |
| | <u>\$1,314 19</u> |

Augustus avenue, from Poplar street to beyond Clarendon avenue. Length, 657 linear feet. Area, 1,968 square yards. Tar macadam roadway constructed, edgestone set and granite block gutters repaved and artificial stone sidewalks constructed.

PUBLIC WORKS DEPARTMENT.

221

| | | |
|--|-------------------|-----------------|
| Engineering expense | \$0 30 | |
| Amount paid to Martino DeMatteo, under contract: | | |
| Removing trees, etc. | | 15 00 |
| 1,950 cubic yards earth excavation @ 30c. | \$585 00 | |
| 11 cubic yards water box excavation @ \$1 | 11 00 | |
| 24 cubic yards rock excavation @ \$4 | 96 00 | |
| 1,001 linear feet straight edgestone and corners hauled and set @ 19c., | 190 19 | |
| 260 linear feet circular edgestone set @ 12c. | 31 20 | |
| 179 square yards granite block paving furnished and laid @ \$2 | 358 00 | |
| 1,937 square yards bituminous macadam surface furnished and placed (tar binder) @ 68c. | 1,317 16 | |
| 7,228 square feet artificial stone sidewalks furnished and placed @ 12c. | 867 36 | |
| 174 square feet artificial stone driveways furnished and laid @ 12c., | 20 88 | |
| Extra work: Rehandle circular edgestone dumped on Poplar street: | | |
| ½ day, foreman, @ \$3 | 1 50 | |
| 1 days' labor @ \$2.25 | 2 25 | |
| Plus 15 per cent on \$3.75, | 56 | |
| ½ day, double team, @ \$6 | 3 00 | |
| Extra work — Grade approach to Clarendon avenue: | | |
| 5 days' labor @ \$2.25 | 11 25 | |
| Plus 15 per cent on \$11.25 | 1 69 | |
| ½ day, steam roller, @ \$12, | 10 50 | |
| Allowance for delay under Article 8 of contract: | | |
| 11 days' labor @ \$2.25 | 24 75 | |
| Plus 15 per cent on \$24.75 | 3 71 | |
| | <u>\$3,551 00</u> | |
| Amount paid in 1915 | <u>2,603 72</u> | |
| | | <u>947 28</u> |
| | | <u>\$947 58</u> |

Bardwell street, from South street to Ballard street. Edgestone set, artificial stone sidewalks constructed and roadway partly paved with asphalt pavement. (Work unfinished.)

| | |
|---------------------------|-----------------|
| Engineering | \$159 31 |
| Inspection | 132 75 |
| Carried forward | <u>\$292 06</u> |

| | | | |
|---|-------------------|-------------------|--|
| <i>Brought forward</i> | | \$292 06 | |
| Engineering expense | | 2 50 | |
| Advertising | | 9 13 | |
| Lumber | | 2 40 | |
| Edgestone, 923 feet 4 inches straight and 300 feet circular and 8 small corners | | 1,073 91 | |
| Labor, handling stock | | 13 96 | |
| Labor, making templets | | 11 00 | |
| Labor, stonecutter | | 21 00 | |
| Labor, chemist | | 5 11 | |
| Amount paid to Central Construction Company, under contract: | | | |
| 500 cubic yards earth excavation @ 55c. | \$275 00 | | |
| 900 linear feet straight edgestone and corners hauled and set @ 17c., | 153 00 | | |
| 300 linear feet circular edgestone set @ 15c. | 45 00 | | |
| 1,200 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid (unfinished) @ 68c. | 816 00 | | |
| 4,500 square feet artificial stone sidewalks furnished and laid @ 11½c. | 528 75 | | |
| | <u>\$1,817 75</u> | | |
| Less 15 per cent retained, | 272 66 | | |
| | | <u>1,545 09</u> | |
| | | <u>\$2,976 16</u> | |
| Credit: Blocks, old granite | \$2 00 | | |
| Edgestone, old granite | 8 40 | | |
| Flagging, old North River | 9 00 | | |
| | | <u>19 40</u> | |
| | | <u>\$2,956 76</u> | |
| <i>Bezley road, from Washington street to Florence street. (Work not started.)</i> | | | |
| Engineering | | \$94 13 | |
| Engineering expense | | 50 | |
| Advertising | | 5 82 | |
| | | <u>\$100 45</u> | |
| <i>Birch street, from Penfield street to Dudley avenue. (Work done in 1915.)</i> | | | |
| Engineering expense | | <u>\$0 30</u> | |
| <i>Blake street (northeasterly), from Randolph street.</i> | | | |
| Engineering | | \$67 71 | |
| Engineering expense | | 20 | |
| Advertising | | 5 82 | |
| | | <u>\$73 73</u> | |
| <i>Burnside street, from Park street to Melville avenue. (Work done in 1915.)</i> | | | |
| Engineering expense | | <u>\$0 30</u> | |

Bradwood street, from Colberg avenue to Belgrade avenue. Length, 872 linear feet. Area, 2,740 square yards. Tar macadam roadway constructed, edgestone set (part on crushed stone foundation), flagging crosswalks laid and artificial stone sidewalks constructed.

Amount paid Martino DeMatteo, under contract:

| | |
|--|------------------|
| Removing trees, bushes, etc. | \$0 50 |
| 971 cubic yards earth excavation @ 35c. | 339 85 |
| 5 cubic yards water box excavation @ \$5 | 25 00 |
| 4 cubic yards rock excavation @ 00c. | 0 00 |
| 1,613 linear feet straight edgestone and corners hauled and set @ 20c. | 322 60 |
| 6 linear feet circular edgestone set @ 14c. | 84 |
| 28 linear feet existing edgestone reset @ 14c. | 3 92 |
| 395 linear feet crushed stone and concrete foundation furnished and placed @ 12c. | 47 40 |
| 36 square yards existing granite block paving relaid @ 40c. | 14 40 |
| 20 square yards existing flagging crosswalks relaid @ 50c. | 10 00 |
| 2,485 square yards bituminous macadam surface furnished and placed (tar binder) @ 70c. | 1,739 50 |
| 10,499 square feet artificial stone sidewalks furnished and placed @ 13c. | 1,364 87 |
| 56 square feet artificial stone driveways furnished and placed @ 13c. | 7 28 |
| 7 covers reset @ \$3 | 21 00 |
| Extra work — Regulate manhole covers over 6 inches: | |
| 3 manhole covers regulated @ \$7.50 | 22 50 |
| Extra work — Rebuild 2 catch-basins: | |
| 2 catch-basins rebuilt @ \$10 | 20 00 |
| Extra work — Cut monument to grade: | |
| ½ day, stonecutter, @ \$5 | 2 50 |
| Plus 15 per cent on \$2.50, | 38 |
| Allowance for delay under Article 8 of contract: | |
| 9 days' labor @ \$2.25 | 20 25 |
| Plus 15 per cent on \$20.25 | 3 04 |
| 1 day, double team, @ \$6 | 6 00 |
| <i>Carried forward</i> | <hr/> \$3,971 83 |

| | | | |
|--|-------------------|----------|-----------------|
| <i>Brought forward</i> | \$3,971 83 | | |
| 8 loads cinders @ \$2.25 | 18 00 | | |
| 25 barrels cement @ \$1.75 | 43 75 | | |
| | <u>\$4,033 58</u> | | |
| Less 1,381 gallons tar not furnished by contractor @ 8c. | 110 48 | | |
| | <u>\$3,923 10</u> | | |
| Less amount paid in 1915, | <u>3,237 91</u> | \$685 19 | <u>\$685 19</u> |

| | | | |
|---|---------|---------|----------------|
| <i>Breck avenue, from Washington street to Nonantum street.</i> (Work not started.) | | | |
| Engineering | \$9 29 | | |
| Advertising | 75 | | |
| | <u></u> | \$10 04 | <u>\$10 04</u> |

Brunswick street, from Blue Hill avenue to Normandy street. Length, 639 linear feet. Area, 1,849 square yards. Roadway paved with asphalt and artificial stone sidewalks constructed by the contractor. Edgestone set, flagging crosswalks laid and concrete base laid by division foremen. (Unfinished work from 1915.)

| | | | |
|--|-------------------|------------|--|
| Engineering | \$108 36 | | |
| Inspection | 87 79 | | |
| Engineering expense | 2 90 | | |
| Advertising | 1 08 | | |
| Labor, chemist | 15 20 | | |
| Labor, making templets | 12 50 | | |
| Lumber | 8 29 | | |
| Cement | 62 | | |
| Gravel | 28 84 | | |
| Teaming | 757 75 | | |
| Steam roller, rolling | 13 00 | | |
| Steam roller, picking | 104 00 | | |
| Amount paid Central Construction Company, under contract: | | | |
| 400 cubic yards earth excavation @ 55c. | \$220 00 | | |
| 44 square yards existing granite block paving relaid, gravel joints, @ 40c. | 17 60 | | |
| 1,849 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$1.60 | 2,958 40 | | |
| 7,649 square feet artificial stone sidewalks furnished and laid @ 12½c. | 956 13 | | |
| 67 square feet artificial stone driveways furnished and laid @ 14c. | 9 38 | | |
| 1 cover reset @ \$3 | 3 00 | | |
| | <u>\$4,164 51</u> | | |
| Less 15 per cent retained, | <u>624 68</u> | 3,539 83 | |
| <i>Carried forward</i> | | \$4,680 16 | |

| | | |
|--|------------|-------------------|
| <i>Brought forward</i> | \$4,680 16 | |
| Labor, edgestone excavating | 21 00 | |
| Labor, edgestone setting | 36 75 | |
| Labor, edgestone for sidewalk | 28 83 | |
| Labor, roadway excavating and subgrading | 907 21 | |
| | <hr/> | |
| | \$5,673 95 | |
| Credit: Blocks, old granite | 6 50 | |
| | <hr/> | |
| | | <u>\$5,667 45</u> |

Caledonian avenue. (See Charles street.) Special appropriation.

Caspian way, from Savin Hill avenue easterly. (Work not started.)

| | | |
|-------------------------------|----------|-----------------|
| Engineering | \$126 04 | |
| Inspection | 8 00 | |
| Engineering expense | 1 40 | |
| Advertising | 2 78 | |
| | <hr/> | |
| | | <u>\$138 22</u> |

Cedric street, from Magasine street to Langdon street. Length, 616 linear feet. Area, 1,360 square yards. Edgestone set, roadway paved with asphalt and artificial stone sidewalks constructed.

| | | |
|---|----------|--|
| Engineering | \$114 55 | |
| Inspection | 214 75 | |
| Engineering expense | 4 85 | |
| Advertising | 3 12 | |
| Edgestone, 1,185 feet straight, 19 feet 3 inches circular | 877 51 | |
| Lumber | 1 63 | |
| Labor, making templets | 5 50 | |
| Labor, handling stock | 17 77 | |
| Teaming | 1 25 | |
| Amount paid Central Construction Company, under contract: | | |
| 1,300 cubic yards earth excavation @ 55c. | \$715 00 | |
| 1,179 linear feet straight edgestone and corners hauled and set @ 18c. | 212 22 | |
| 20 linear feet circular edgestone set @ 11c. | 2 20 | |
| 11 linear feet existing edgestone reset @ 10c. | 1 10 | |
| 1,356 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$1.60, | 2,169 60 | |
| 5,302 square feet artificial stone sidewalks furnished and laid @ 12½c. | 662 75 | |
| 5 covers reset @ \$3 | 15 00 | |

\$3,777 87

Less 15 per cent retained,

566 68

3,211 19

\$4,452 12

Credit: Flagging, old North River

10 80

\$4,441 32

Centervale park, from Upland avenue to Bourneside street. Length, 517 linear feet. Area, 2,234 square yards. Edgestone set and roadway paved with asphalt. (Work unfinished.)

| | |
|---|-------------------|
| Engineering | \$90 70 |
| Inspection | 144 50 |
| Engineering expense | 3 15 |
| Advertising | 3 12 |
| Labor, edgestone reset | 22 25 |
| Labor, handling stock | 28 45 |
| Edgestone, 1,900 feet straight, 8 small corners and 30 feet 6 inches circular | 1,180 97 |
| Labor, making templets | 7 50 |
| Gravel | 2 20 |
| Cement | 50 |
| Lumber | 4 44 |
| Teaming | 17 00 |
| Amount paid Central Construction Com- pany, under contract: | |
| 500 cubic yards earth excava- tion @ 55c. | \$275 00 |
| 1,850 linear feet straight edge- stone and corners hauled and set @ 18c. | 333 00 |
| 30 linear feet circular edge- stone set @ 11c. | 3 30 |
| 2,100 square yards concrete base, bituminous concrete binder and asphalt wearing surface fur- nished and laid @ \$1.60, 7 covers reset @ \$3 | 3,360 00 21 00 |
| | <hr/> |
| | \$3,992 30 |
| Less 15 per cent retained, | 598 85 |
| | <hr/> |
| | 3,393 45 |
| | <hr/> |
| | \$4,898 23 |
| Credit: Flagging, old North River | 29 82 |
| | <hr/> |
| | <u>\$4,868 41</u> |

Chapin avenue, from Mt. Vernon street to Preston road. Length, 499 linear feet. Area, 1,184 square yards. Tar macadam roadway constructed, edgestone set, block gutters paved and artificial stone sidewalks constructed. (Final payment for work done in 1915.)

| | |
|---|---------------|
| Amount paid to John Kelley Company, under contract: | |
| Removing trees, bushes, etc. | \$25 00 |
| 1,776 cubic yards earth excavation @ 35c. | 621 60 |
| 9 cubic yards rock excavation @ \$3 | 27 00 |
| 923 linear feet straight edgestone and corners hauled and set @ 19c. | 175 37 |
| 69 linear feet circular edgestone set @ 10c., 200 linear feet existing edgestone reset @ 10c. | 6 90 20 00 |
| 272 square yards granite block paving hauled and laid @ 75c. | 204 00 |
| 935 square yards bituminous macadam sur- face furnished and placed (tar binder) @ 62c. | 579 70 |
| | <hr/> |
| Carried forward | \$1,659 57 |

| | |
|---|------------|
| <i>Brought forward</i> | \$1,659 57 |
| 4,882 square feet artificial stone sidewalks furnished and laid @ 12½c. | 610 25 |
| 2 covers reset @ \$3 | 6 00 |
| 178 linear feet wooden fence furnished and built @ 25c. | 44 50 |
| Extra work — Grade banks as directed at railroad fence: | |
| 1½ days, foreman, @ \$5 | 7 50 |
| 8½ days' labor @ \$2 | 17 00 |
| Plus 15 per cent on \$24.50 | 3 68 |
| 2½ days, double team, @ \$6 | 15 00 |
| Extra work — Haul circular edgestone out of lot: | |
| 1½ days' labor @ \$2 | 3 00 |
| Plus 15 per cent on \$3 | 45 |
| ¾ day, double team, @ \$6 | 4 50 |
| Extra work — Set edgestone into retaining wall at railroad bridge: | |
| 1 day, foreman, @ \$5 | 5 00 |
| ¾ day, mason, @ \$5 | 3 75 |
| 3½ days' labor @ \$2 | 7 00 |
| Plus 15 per cent on \$15.75 | 2 38 |
| 100 bricks @ 1½c. | 1 50 |
| 2 bags cement @ 50c. | 1 00 |
| 1 barrel sand @ 20c. | 20 |
| | <hr/> |
| | \$2,392 26 |
| Less amount paid in 1915 | 2,182 17 |
| | <hr/> |

\$210 09

Chauncy street, from Bedford street 106 feet northwesterly. Widened on southwesterly side. Edgestone set, roadway repaved on concrete base with pitch joints, crosswalks relaid and brick sidewalks relaid.

| | |
|------------------------------|--------|
| Labor, edgestone excavating | \$6 25 |
| Labor, edgestone resetting | 5 75 |
| Labor, concrete base | 36 34 |
| Labor, roadway excavating | 166 51 |
| Labor, roadway repaving | 208 66 |
| Labor, crosswalks excavating | 15 00 |
| Labor, crosswalks relaying | 30 25 |
| Labor, brick walks relaying | 2 00 |
| Crushed stone, 15.4 tons | 20 02 |
| Cement, 10 barrels | 20 00 |
| Pitch, 6,245 pounds | 37 94 |
| Pebbles, 9.58 tons | 23 48 |
| Sand, 11 tons | 10 50 |
| Gravel, 38 tons | 24 65 |
| Bricks, 400 sidewalk | 5 01 |
| Blocks, 2,550 old granite | 51 00 |
| Flagging | 37 13 |
| Teaming | 135 00 |
| Edgestone | 8 55 |
| | <hr/> |

\$844 04

Claybourne street, from 210 feet south of Dakota street to Park street.
(Unfinished work from 1915.)

| | |
|---------------------|--------|
| Engineering | \$5 00 |
| Labor, cutting bank | 114 10 |
| Teaming | 326 10 |
| | <hr/> |

\$445 20

Cliffmont street, southwesterly from Canterbury street. (Work not started.)

| | | |
|-------------------------------|---------|----------------|
| Engineering | \$64 66 | |
| Engineering expense | 90 | |
| Advertising | 2 03 | |
| | | <u>\$67 59</u> |

Condor street, from Glendon street to East Eagle street. Edgestone set, roadway paved with Hassam block pavement on a Hassam base, brick sidewalks laid and a sea wall was built.

| | |
|--|----------|
| Engineering | \$380 49 |
| Inspection | 646 55 |
| Engineering expenses | 11 33 |
| Advertising | 11 10 |
| License | 1 00 |
| Edgestone, 1,540 feet straight, 13 small corners and 54.2 feet, circular | 1,325 75 |
| Brick, 56,250 sidewalk | 703 12 |
| Blocks, 880 granite | 48 04 |
| Gravel | 6 49 |
| Cement, 20 bags | 9 90 |
| Crushed stone, 8 tons | 11 00 |
| Moving locker and booths | 45 00 |
| Teaming | 20 00 |
| Labor, edgestone excavation | 1 50 |
| Labor, edgestone resetting | 4 50 |
| Labor, driveway excavating | 1 50 |
| Labor, driveway paving | 12 00 |
| Labor, concrete base | 4 50 |

Amount paid Bay State Dredging and Contracting Company:

| | |
|--|-----------|
| Removing trees, etc. | \$10 00 |
| 669 cubic yards earth excavation @ 50c. | 334 50 |
| 2 cubic yards rock excavation @ \$1 | 2 00 |
| 495 cubic yards filling furnished @ \$1.40 | 693 00 |
| 1,554 linear feet straight edgestone and corners set @ 15c. | 233 10 |
| 56 linear feet circular edgestone set @ 20c. | 11 20 |
| 208 linear feet existing edgestone reset @ 15c. | 31 20 |
| 17 square yards granite block paving relaid, gravel joints, @ 45c. | 7 65 |
| 3,150 square yards Hassam block pavement furnished and laid, grout joints, including concrete foundation, @ \$3.25 | 10,237 50 |
| 1,216 square yards brick sidewalk laid @ 45c. | 547 20 |
| Building sea wall and fence | 5,000 00 |

| | | |
|----------------------------------|--------------------|-------------------|
| <i>Carried forward</i> | <u>\$17,107 35</u> | <u>\$3,243 77</u> |
|----------------------------------|--------------------|-------------------|

| | | |
|--|-------------|-------------|
| <i>Brought forward</i> | \$17,107 35 | \$3,243 77 |
| Extra work — Cut and dress edgestone for entrances not shown on plans: | | |
| 8½ hours, stonecutter, @ 62½c. | 5 31 | |
| Plus 15 per cent on \$5.31 | 80 | |
| Cut sheet piling over sewer trench and plank-ing in old shed floor: | | |
| 13½ hours' labor @ 30c. | 4 05 | |
| Plus 15 per cent on \$4.05 | 61 | |
| Extra work — Haul and place riprap stone to protect slopes at end of sea wall: | | |
| 3 hours, double team, @ 81½c. | 2 44 | |
| 6 hours' labor @ 30c. | 1 80 | |
| Plus 15 per cent on \$1.80 | 27 | |
| Extra work — Build masonry wall to connect sea wall with old wall on Glendon street: | | |
| 5 hours, mason, @ 50c. | 2 50 | |
| Plus 15 per cent on \$2.50 | 38 | |
| Extra work — Remove old edgestone where directed and backfill water trench: | | |
| 9 hours, foreman, @ 60c. | 5 40 | |
| 22½ hours labor @ 30c. | 6 75 | |
| Plus 15 per cent on \$12.15, | 1 82 | |
| 9 hours, double team, @ 81½c. | 7 31 | |
| | <hr/> | |
| | \$17,146 79 | |
| Less amount deducted for finishing old wall with concrete instead of rubble masonry | 25 00 | |
| | <hr/> | |
| | 17,121 79 | |
| | | <hr/> |
| | | \$20,365 56 |

Conley street, from Old Colony Parkway to Tenean street. (Work not started.)

| | | |
|-------------|---------|---------|
| Engineering | \$13 00 | |
| Advertising | 2 03 | |
| | <hr/> | |
| | | \$15 03 |

Cornell street, from Orange street to Colberg avenue. Roadway rough graded. (Work unfinished.)

| | |
|------------------------|----------|
| Engineering | \$149 52 |
| Inspection | 51 58 |
| Engineering expense | 1 55 |
| Advertising | 2 78 |
| | <hr/> |
| <i>Carried forward</i> | \$205 43 |

| | | |
|--|----------|-------------------|
| <i>Brought forward</i> | | \$205 43 |
| Edgestone, 54 feet | | 39 30 |
| Teaming | | 451 75 |
| Labor, roadway excavating | | 215 36 |
| Labor, temporary steps | | 3 50 |
| Amount paid to Martino DeMatteo, under contract: | | |
| 1,000 cubic yards earth excavation @ 75c. | \$750 00 | |
| Less 15 per cent retained | 112 50 | |
| | | 637 50 |
| | | <u>\$1,552 84</u> |

Crandall street, from Augustus avenue to Hillside avenue. Length, 407 linear feet. Area, 1,176 square yards. Tar macadam roadway constructed, edgestone set (part on crushed stone) and artificial stone sidewalks constructed.

Engineering expense \$0 30

Amount paid Martino DeMatteo, under contract:

| | | |
|--|------------|--------|
| Removing trees, bushes, etc. | \$5 00 | |
| 675 cubic yards earth excavation @ 30c. | 202 50 | |
| 8 cubic yards rock excavation @ \$4 | 32 00 | |
| 762 linear feet straight edgestone and corners hauled and set @ 19c. | 144 78 | |
| 22 linear feet circular edgestone set @ 11c. | 2 42 | |
| 378 linear feet crushed stone and concrete foundation furnished and placed @ 10c. | 37 80 | |
| 1,177 square yards bituminous macadam surface furnished and placed (tar binder) @ 68c. | 800 36 | |
| 4,920 square feet artificial stone sidewalks furnished and laid @ 12c. | 590 40 | |
| 231 square feet artificial stone driveways furnished and laid @ 20c. | 46 20 | |
| Extra work — Haul circular edgestone from Poplar street: | | |
| ½ day's labor @ \$2.25 | 1 13 | |
| Plus 15 per cent on \$1.13, | 17 | |
| ½ day, double team, @ \$6 | 1 50 | |
| Extra work — Grade approach at Hillside avenue: | | |
| ½ day, foreman, @ \$3 | 1 50 | |
| 3 days' labor @ \$2.25 | 6 75 | |
| Plus 15 per cent on \$8.25, | 1 24 | |
| ½ day, double team, @ \$6 | 3 00 | |
| <i>Carried forward</i> | \$1,876 75 | \$0 30 |

| | | | |
|--|-------------------|--------|-------------------|
| <i>Brought forward</i> | \$1,876 75 | \$0 30 | |
| Extra work — Haul surplus edgestone to Augustus avenue: | | | |
| $\frac{1}{2}$ day's labor @ \$2.25 | 1 13 | | |
| Plus 15 per cent on \$1.13, | 17 | | |
| $\frac{1}{2}$ day, steam roller, @ \$12 | 3 00 | | |
| Allowance for delay under Article 8 of contract: | | | |
| 2 days' labor @ \$2.25 | 4 50 | | |
| Plus 15 per cent on \$4.50, | 68 | | |
| | <u>\$1,886 23</u> | | |
| Less amount paid in 1915 | <u>1,486 05</u> | 400 18 | |
| | | | <u>\$400 48</u> |
| <i>Crown path, from Claybourne street to Washington street. Length, 221 linear feet. Area, 245 square yards. Artificial stone walks and steps constructed.</i> | | | |
| Engineering | \$166 97 | | |
| Inspection | 190 00 | | |
| Engineering expense | 3 75 | | |
| Advertising | 4 50 | | |
| Amount paid James Doherty, under contract: | | | |
| Building artificial stone walks, steps and walls, | <u>2,839 26</u> | | |
| | | | <u>\$3,204 48</u> |
| <i>Cummings road, from Commonwealth avenue extended. (Work not started.)</i> | | | |
| Engineering | \$113 95 | | |
| Advertising | 2 57 | | |
| | | | <u>\$116 52</u> |
| <i>Dana avenue footway, from Dana avenue to Easton avenue. (Work not started.)</i> | | | |
| Engineering | \$84 33 | | |
| Engineering expense | 7 45 | | |
| | | | <u>\$91 78</u> |
| <i>Dane street, from Holbrook street to Orchard street. (Work done in 1915.)</i> | | | |
| Engineering expense | | | <u>\$0 40</u> |
| <i>Dempster street, from Ruggles street to Halleck street. (Work done in 1915.)</i> | | | |
| Engineering expense | | | <u>\$0 30</u> |
| <i>Downer avenue, extended to Sawyer avenue. (Work not started.)</i> | | | |
| Engineering | \$52 05 | | |
| Advertising | 2 78 | | |
| | | | <u>\$54 83</u> |
| <i>Dunlap street, from Washington street to Whitfield street. Length, 804 linear feet. Area, 1,787 square yards. Roadway paved with asphalt</i> | | | |

and artificial stone sidewalks constructed. Edgestone set, flagging crosswalks laid and concrete base laid by division forces. (Unfinished work from 1915.)

| | | |
|---|------------|-------------------|
| Engineering | \$30 92 | |
| Inspection | 42 00 | |
| Engineering expense | 85 | |
| Advertising | 4 80 | |
| Crushed stone, 189.3 tons | 227 25 | |
| Cement, 205 barrels | 270 04 | |
| Sand, 99 cubic yards | 113 40 | |
| Gravel, 9 cubic yards | 8 82 | |
| Hire of concrete mixer | 110 00 | |
| Amount paid William J. Rafferty & Co., under contract: | | |
| 1,759 square yards bituminous concrete binder and asphalt wearing surface furnished and laid @ \$1.53 | \$2,891 27 | |
| 823 square feet artificial stone sidewalks furnished and laid @ 20c. | 164 60 | |
| 64 square feet artificial stone driveways furnished and laid @ 20c. | 12 80 | |
| 10 linear feet artificial stone curb furnished and laid @ \$1 | 10 00 | |
| Extra work — Remove surplus excavation left by Paving Service: | | |
| 10 cubic yards earth excavation removed @ 75c. | 7 50 | |
| Extra work — Trim artificial stone to street line at Hall's Garage: | | |
| 6 hours, stonecutter, @ 62½c. | 3 75 | |
| 4 hours' labor @ 25c. | 1 00 | |
| Plus 15 per cent on \$4.75, | 71 | |
| | <hr/> | |
| | \$2,891 63 | |
| Less amount paid in 1915, | 2,556 71 | |
| | <hr/> | |
| | 334 92 | |
| | | <hr/> |
| | | <u>\$1,143 00</u> |

Dunster road, from Center street to Pond street. Edgestone set, artificial stone sidewalks constructed and roadway partly constructed with asphalt pavement. (Work unfinished.)

| | |
|--|------------|
| Engineering | \$232 22 |
| Inspection | 139 20 |
| Engineering expense | 5 80 |
| Advertising | 3 13 |
| Edgestone, 1066 feet straight, 19 feet circular and 10 small corners | 828 23 |
| Lumber | 1 56 |
| Labor, handling stock | 16 31 |
| Labor, making templets | 5 50 |
| Labor, stonecutter | 33 00 |
| Teaming | 1 25 |
| | <hr/> |
| <i>Carried forward</i> | \$1,266 20 |

| | | |
|---|-------------------|--------------------------|
| <i>Brought forward</i> | | \$1,266 20 |
| Amount paid to Central Construction Company, under contract: | | |
| 1,500 cubic yards earth excavation @ 55c. | \$825 00 | |
| 1,000 linear feet straight edgestone and corners hauled and set @ 17c. | 170 00 | |
| 19 linear feet circular edgestone set @ 15c. | 2 85 | |
| 100 linear feet existing edgestone reset @ 12c. | 12 00 | |
| 5,000 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid (unfinished) @ 68c. | 3,400 00 | |
| 6,100 square feet artificial stone sidewalks furnished and laid @ 11½c. | 716 75 | |
| 100 square feet artificial stone driveways furnished and laid @ 15c. | 15 00 | |
| | <u>\$5,141 60</u> | |
| Less 15 per cent retained, | 771 24 | |
| | | <u>4,370 36</u> |
| | | <u>\$5,636 56</u> |
| Credit: Block, old granite . . . | \$6 50 | |
| Flagging, old North River . . . | 18 00 | |
| | | <u>24 50</u> |
| | | <u><u>\$5,612 06</u></u> |

East First street, from H street to West First street. Repaved roadway with old granite blocks with cement grout joints. (Unfinished work from 1915.)

| | |
|---|--------------------------|
| Engineering | \$34 13 |
| Engineering expense | 30 |
| Labor, edgestone excavating | 3 75 |
| Labor, edgestone setting | 4 25 |
| Labor, sidewalk excavating | 2 50 |
| Labor, sidewalk laying | 26 08 |
| Labor, roadway excavating | 39 25 |
| Labor, roadway paving | 115 84 |
| Edgestone, 29 feet straight | 12 48 |
| Flagging, 185 feet 2 inches granite | 143 97 |
| Bricks, 48,000 sidewalk | 606 25 |
| Blocks, 73,348 old granite | 1,706 09 |
| Cement | 315 69 |
| Sand, 127 cubic yards | 189 26 |
| Gravel, 383½ cubic yards | 378 43 |
| Teaming | 247 25 |
| | <u>\$3,825 52</u> |
| Credit: Edgestone | 16 16 |
| | <u><u>\$3,809 36</u></u> |

Elgin street, from Centre street to West Roxbury Branch Railroad. Length, 598 linear feet. Area, 1,728 square yards. Roadway paved with

asphalt on a six (6) inch concrete base, edgestone set and artificial stone sidewalks constructed.

| | | |
|--|------------|---------|
| Inspection | | \$14 00 |
| Asphalt analysis | | 4 00 |
| Amount paid Charles J. Jacobs Company, under contract: | | |
| Removing trees, bushes, etc. | \$50 00 | |
| 1,212 cubic yards earth excavation @ 30c. | 363 60 | |
| 102 cubic yards rock excavation @ \$5 | 510 00 | |
| 365 linear feet straight edgestone and corners hauled and set @ 20c. | 73 00 | |
| 59 linear feet circular edgestone set @ 15c. | 8 85 | |
| 1,780 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$2.23, | 3,969 40 | |
| 7,090 square feet artificial stone sidewalks furnished and laid @ 10c. | 709 00 | |
| 173 square feet artificial stone driveways furnished and laid @ 12c. | 20 76 | |
| 10 covers reset @ \$3 | 30 00 | |
| Extra work — Omit the hauling and setting of about 700 feet of straight edgestone and substitute the furnishing and setting of same: | | |
| 749 linear feet straight edgestone furnished and set @ 97c. | 726 53 | |
| Extra work — Relay paving and set edgestone at approach to railroad: | | |
| 1 day, paver, @ \$5 | 5 00 | |
| 2 days' labor @ \$2 | 4 00 | |
| Plus 15 per cent on \$9 | 1 35 | |
| Extra work — Grade approaches at Centre and Hillcrest streets: | | |
| 1½ days' labor @ \$2 | 3 00 | |
| Plus 15 per cent on \$3 | 45 | |
| Extra work — Omit the hauling and laying of granite block paving on concrete base and grout joints and substitute the relaying of same on concrete base, grout joints: | | |
| 14 square yards existing granite block paving relaid, concrete base, grout joints, @ \$1.50 | 21 00 | |
| | <hr/> | |
| | \$6,495 94 | |
| Carried forward | \$6,495 94 | \$18 00 |

PUBLIC WORKS DEPARTMENT.

235

| | | | |
|-----------------------------|-----------------|-----------------|-----------------|
| <i>Brought forward</i> | \$6,495 94 | \$18 00 | |
| Less amount paid in 1915, | <u>6,395 94</u> | 100 00 | |
| | | <u>\$118 00</u> | |
| Credit: Edgestone | | 11 60 | |
| | | | <u>\$106 40</u> |

Epping street, from Washington street to Norfolk street. Length, 241 linear feet. Area, 556 square yards. Edgestone set and street rough graded. (Work unfinished.)

| | | | |
|--|--------------|-----------------|-----------------|
| Engineering | \$30 16 | | |
| Inspection | 47 26 | | |
| Engineering expense | 85 | | |
| Advertising | 1 08 | | |
| Edgestone, 380 feet straight and 19 feet circular | 297 39 | | |
| Labor, handling stock | 5 70 | | |
| Amount paid to Central Construction Company, under contract: | | | |
| 200 cubic yards earth excavation @ 55c. | \$110 00 | | |
| Less 15 per cent retained | <u>16 50</u> | | |
| | | 93 50 | |
| | | <u>\$475 94</u> | |
| Credit: Blocks, 1,760 old granite | | 35 20 | |
| | | | <u>\$440 74</u> |

Eric avenue, from Savin Hill avenue to 344 feet northerly. Length, 335 linear feet. Area, 215 square yards. Edgestone set, roadway paved with asphalt on a concrete base and artificial stone sidewalks constructed. (Work unfinished.)

| | | | |
|--|-----------------|----------|--|
| Engineering | \$218 96 | | |
| Inspection | 106 68 | | |
| Engineering expense | 9 20 | | |
| Advertising | 7 91 | | |
| Edgestone, 419 feet 7 inches straight, 2 small corners and 21 feet 2 inches circular | 336 87 | | |
| Lumber | 3 78 | | |
| Labor, handling stock | 6 39 | | |
| Labor, making templets | 5 00 | | |
| Teaming | 2 50 | | |
| Amount paid Central Construction Company, under contract: | | | |
| 409 cubic yards earth excavation @ 55c. | \$224 95 | | |
| 410 linear feet straight edgestone and corners hauled and set @ 18c., | 73 80 | | |
| 20 linear feet circular edgestone set @ 11c. | 2 20 | | |
| 7 linear feet existing edgestone reset @ 10c. | 70 | | |
| 1,215 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$1.60 | <u>1,944 00</u> | | |
| <i>Carried forward</i> | \$2,245 65 | \$697 27 | |

| | | |
|---|-------------------|-------------------|
| Brought forward | \$2,245 65 | \$697 27 |
| 3,330 square feet artificial stone sidewalks fur- nished and laid (un- finished) @ 9c. | 299 70 | |
| | <u>\$2,545 35</u> | |
| Less 15 per cent retained, | 381 80 | |
| | | <u>2,163 55</u> |
| | | \$2,860 82 |
| Credit: Flagging, old North River | | 23 04 |
| | | <u>\$2,837 78</u> |

Everton street, between Olney street and Geneva avenue. Length, 690 linear feet. Area, 2,026 square yards. Edgestone set, roadway paved with Topeka, artificial stone sidewalks constructed. (Work unfinished.)

| | | |
|---|-------------------|------------|
| Engineering | \$262 85 | |
| Inspection | 195 00 | |
| Engineering expense | 7 75 | |
| Advertising | 1 08 | |
| Edgestone, 730 feet straight, 4 small corners and 549 feet circular | 1,141 71 | |
| Lumber | 11 01 | |
| Nails | 05 | |
| Sand | 13 20 | |
| Gravel | 17 00 | |
| Cement | 1 04 | |
| Dynamite and exploders | 43 18 | |
| Teaming | 464 15 | |
| Labor, handling stock | 8 70 | |
| Labor, making templets | 6 62 | |
| Labor, building steps | 12 00 | |
| Labor, edgestone excavating | 343 89 | |
| Labor, edgestone resetting | 232 22 | |
| Labor, excavating roadway | 428 43 | |
| Amount paid John E. Gill, under contract: Removing trees and stumps | 350 00 | |
| Amount paid Central Construction Com- pany, under contract: | | |
| 500 cubic yards earth excava- tion @ 55c. | \$275 00 | |
| 100 cubic yards rock excava- tion @ \$5 | 500 00 | |
| 260 linear feet straight edge- stone and corners hailed and set @ 18c., | 46 80 | |
| 130 linear feet circular edge- stone set @ 11c. | 14 30 | |
| Extra work—Omit sheet asphalt and sub- stitute Topeka pavement: | | |
| 1,950 square yards concrete base and Topeka pave- ment furnished and laid (unfinished) @ \$1.10 | 2,145 00 | |
| | <u>\$2,981 10</u> | |
| Carried forward | \$2,981 10 | \$3,540 48 |

PUBLIC WORKS DEPARTMENT.

237

| | | | |
|--------------------------------------|------------|------------|------------|
| <i>Brought forward</i> | \$2,981 10 | \$3,540 48 | |
| Less 15 per cent retained, | 447 17 | | |
| | <hr/> | <hr/> | |
| | | 2,533 93 | \$6,074 41 |

Faywood avenue, from Orient avenue to Tower street. (Work not started.)

| | | |
|-----------------------|-------|--------|
| Engineering | <hr/> | \$6 50 |
|-----------------------|-------|--------|

Fernboro street, from Lawrence avenue to Intervale street. Length, 500 linear feet. Asphalt pavement laid on a 6-inch Portland cement concrete base, edgestone set, flagging crosswalks laid and artificial stone sidewalks constructed.

| | |
|---|----------|
| Engineering | \$115 73 |
| Inspection | 168 00 |
| Engineering expense | 3 25 |
| Advertising | 11 63 |
| Edgestone, 920 feet straight, 62 feet 8 inches circular and 2 small corners | 617 95 |
| Flagging, 14 feet granite | 11 27 |
| Lumber | 2 73 |
| Teaming | 1 25 |
| Labor, handling stock | 14 11 |

Amount paid to James Doherty, under contract:

| | |
|---|--------|
| Removing trees, etc. | \$0 01 |
| 708 cubic yards earth excavation @ 45c. | 318 60 |
| 25 cubic yards water box excavation @ \$1 | 25 00 |
| 33.5 cubic yards rock excavation @ \$3 | 100 50 |
| 920 linear feet straight edgestone and corners hauled and set @ 15c., | 138 00 |
| 44 linear feet circular edgestone set @ 12c. | 5 28 |
| 40 linear feet existing edgestone reset @ 11c. | 4 40 |
| 15 square yards existing granite block paving relaid @ 30c. | 4 50 |
| 18 square yards existing granite block paving relaid, grout joints, including concrete base, @ \$1.20 | 21 60 |
| 3 square yards flagging crosswalks hauled and laid, grout joints, including concrete base, @ \$1.45 | 4 35 |
| 20 square yards existing flagging crosswalks relaid, grout joints, including concrete base, @ \$1.20 | 24 00 |

| | | |
|----------------------------------|----------|----------|
| <i>Carried forward</i> | <hr/> | <hr/> |
| | \$648 24 | \$945 92 |

| | | |
|--|----------|-------------------|
| <i>Brought forward</i> | \$646 24 | \$945 92 |
| 1,430 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and placed @ \$2.18 | 3,117 40 | |
| 6,224 square feet artificial stone sidewalks furnished and laid @ 10c. | 622 40 | |
| 72 square feet artificial stone driveways furnished and laid @ 11c. | 7 92 | |
| 6 covers reset @ \$3 | 18 00 | |
| Extra work — Regulate catch-basin at interval street more than six (6) inches: | | |
| 4 hours, mason, @ 62½c. | 2 50 | |
| 8 hours' labor @ 30c. | 2 40 | |
| Plus 15 per cent on \$4.90, | 74 | |
| 2 bags cement @ 50c. | 1 00 | |
| 150 bricks @ 1c. | 1 50 | |
| | <hr/> | |
| | | 4,420 10 |
| | | <hr/> |
| | | <u>\$5,366 02</u> |

Fordham road, from Commonwealth avenue to Brighton avenue. (Work not started.)

| | |
|-------------------------------|----------------|
| Engineering | \$27 28 |
| Engineering expense | 50 |
| Advertising | 4 60 |
| | <hr/> |
| | <u>\$32 38</u> |

Gaffney street, from Commonwealth avenue to Boston & Albany Railroad. Edgestone set, roadway rough graded. (Work unfinished.)

| | |
|---|-------------------|
| Engineering | \$162 51 |
| Inspection | 31 75 |
| Engineering expense | 3 70 |
| Advertising | 4 62 |
| Edgestone, 535 feet 3 inches straight and 10 small corners | 445 38 |
| Labor, handling stock | 8 03 |
| Amount paid to Central Construction Company, under contract: | |
| 1,750 cubic yards earth excavation @ 74c. | \$1,295 00 |
| 12 cubic yards rock excavation @ \$6 | 72 00 |
| 580 linear feet straight edgestone and corners hauled and set (unfinished) @ 10c. | 58 00 |
| | <hr/> |
| | \$1,425 00 |
| Less 5 per cent retained | 71 25 |
| | <hr/> |
| | 1,353 75 |
| | <hr/> |
| | <u>\$2,009 74</u> |

Glencoe street, from North Beacon street to Boston & Albany Railroad. (Work not started.)

| | | |
|-------------------------------|----------|-----------------|
| Engineering | \$100 59 | |
| Engineering expense | 40 | |
| Advertising | 4 60 | |
| | | <u>\$105 59</u> |

Glendower road, from Kittredge street to Poplar street. Length, 1,925 linear feet. Area, 8,600 square yards. Roadway paved with asphalt on a six (6) inch Portland cement concrete base. Edgestone set and artificial stone sidewalks constructed.

| | | |
|--|-------------|------------|
| Engineering | \$113 29 | |
| Inspection | 266 00 | |
| Engineering expense | 4 10 | |
| Edgestone, 1,177 feet 3 inches straight and 4 small corners | 724 68 | |
| Blocks | 3 40 | |
| Labor, excavating | 5 32 | |
| Labor, making templates | 8 25 | |
| Labor, handling stock | 4 78 | |
| Lumber | 2 55 | |
| Teaming | 2 50 | |
| Amount paid to Charles J. Jacobs Company, under contract: | | |
| Removing trees, etc. | \$0 00 | |
| 3,618 cubic yards earth excavation @ 40c. | 1,447 20 | |
| 14 cubic yards water box excavation @ \$1.50 | 21 00 | |
| 20 cubic yards rock excavation @ \$3 | 60 00 | |
| 3,761 linear feet straight edgestone and corners hauled and set @ 19c., | 714 59 | |
| 38 linear feet circular edgestone set @ 15c. | 5 70 | |
| 195 linear feet existing edgestone reset @ 12c. | 23 40 | |
| 1,230 linear feet crushed stone and concrete foundation furnished and placed @ 14c. | 172 20 | |
| 6 square yards existing granite block paving relaid @ 40c. | 2 40 | |
| 5 square yards granite block paving hauled and laid, grout joints, including concrete base, @ \$1.50 | 7 50 | |
| 5,578 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and placed @ \$2.13 | 11,881 14 | |
| 23,986 square feet artificial stone sidewalks furnished and laid @ 10c. | 2,398 60 | |
| 529 square feet artificial stone driveways furnished and laid @ 12c. | 63 48 | |
| Carried forward | \$16,797 21 | \$1,134 87 |

| | | |
|---|--------------------|--------------------|
| <i>Brought forward</i> | \$16,797 21 | \$1,134 87 |
| 18 covers reset @ \$3 | 54 00 | |
| Extra work — Regulate sewer manhole covers over six (6) inches: | | |
| 1½ days, foreman, @ \$5 | 6 88 | |
| 3½ days, mason, @ \$6 | 20 25 | |
| 2½ days, helper, @ \$2.80 | 8 05 | |
| 6½ days, labor, @ \$2.40 | 16 20 | |
| Plus 15 per cent on \$51.38 | 7 71 | |
| 625 bricks @ \$12 M. | 7 50 | |
| 12 bags cement @ 60c. | 7 20 | |
| 12 cubic feet sand @ 5c. | 60 | |
| Extra work — Remove asphalt surface and concrete base which has settled over sewer trench and replace with new concrete base and asphalt surface as directed: | | |
| 28 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$2.13 | 59 64 | |
| | <u>\$16,985 24</u> | |
| Less amount paid in 1915, | <u>7,514 11</u> | |
| | | <u>9,471 13</u> |
| | | <u>\$10,606 00</u> |

Gove street, from Cottage street to Venice street. (Work not started.)

| | |
|----------------------|----------------|
| Engineering | \$21 00 |
| Engineering expenses | 60 |
| | <u>\$21 60</u> |

Gove Street Footbridge, from Orleans street to Bremen street. Footway, built over tracks of Boston & Albany Railroad. One hundred fifty-seven-foot span riveted through two steel trusses. (Unfinished work from 1915.)

| | |
|--------------------------------------|---------------|
| Engineering | \$462 10 |
| Inspection | 228 01 |
| Advertising | 14 03 |
| Printing | 44 50 |
| Edgestone | 51 80 |
| Bricks, sidewalk | 45 63 |
| Sand | 8 40 |
| Labor, setting edgestone | 92 74 |
| Labor, changing doors | 31 74 |
| Electric lighting | 7 61 |
| Rent of land | 2 91 |
| Labor, relaying brick walks | 57 02 |
| Teaming | 57 50 |
| Amount paid E. S. Butterfield & Co.: | |
| Contract price | \$860 00 |
| Less previous payment in 1915, | <u>731 00</u> |
| | <u>129 00</u> |
| <i>Carried forward</i> | \$1,232 99 |

PUBLIC WORKS DEPARTMENT.

241

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| <i>Brought forward</i> | \$1,232 99 | |
| Amount paid Boston Bridge Works, Inc., under contract: | | |
| Contract price | \$8,626 00 | |
| Extra work as ordered: | | |
| 570 pounds steel plates @ 45c., | 25 65 | |
| 48 hours' labor on plates @ 90c. | 43 20 | |
| Labor on anchor bolts, 8 hours, @ 90c. | 7 20 | |
| | <u>8,702 05</u> | |
| | | <u>\$9,935 04</u> |
| <i>Grace street, from Roslin street to Walton street. (Work done in 1915.)</i> | | |
| Engineering | \$2 55 | |
| Engineering expense | 10 | |
| | | <u>\$2 65</u> |
| <i>Granada avenue, from Metropolitan avenue to Ethel street. Edgestone set and roadway rough graded. (Work unfinished.)</i> | | |
| Engineering | \$147 61 | |
| Inspection | 36 18 | |
| Engineering expense | 1 60 | |
| Advertising | 2 78 | |
| Edgestone, 716 feet straight, 6 small corners and 52 feet circular | 602 52 | |
| Labor, handling stock | 11 84 | |
| Amount paid Martino DeMatteo, under contract: | | |
| 250 cubic yards earth excava- tion @ 75c. | \$187 50 | |
| 700 linear feet straight edge- stone and corners hauled and set @ 25c. | 175 00 | |
| 30 linear feet circular edge- stone set @ 12c. | 3 60 | |
| 25 linear feet existing edge- stone reset @ 13c. | 3 25 | |
| | <u>\$369 35</u> | |
| Less 15 per cent retained | 55 40 | |
| | <u>313 95</u> | |
| | | <u>\$1,116 48</u> |
| <i>Halifax street, from South Huntington avenue to Pond View street. (Work not started.)</i> | | |
| Engineering | \$11 71 | |
| Advertising | 3 13 | |
| | | <u>\$14 84</u> |
| <i>Hallet street, from Minot street to New York, New Haven & Hartford Railroad. Length, 1,858 linear feet. Area, 7,020 square yards. Six- inch macadam roadway constructed, edgestone set, block gutters paved, flagging crosswalks laid and artificial stone sidewalks con- structed.</i> | | |
| Amount paid to John Kelly Company, under contract: | | |
| 25,852 cubic yards filling fur- nished and placed @ 74c. | \$19,130 48 | |
| <i>Carried forward</i> | <u>\$19,130 48</u> | |

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|---|--------------------|-------------------|
| <i>Brought forward</i> | \$19,130 48 | |
| Extra work — Build approach to Hallet street from the old road near the railroad: | | |
| 5 hours, foreman, @ 62½c., | 3 13 | |
| 41 hours, labor @ 25c. | 10 25 | |
| Plus 15 per cent on \$13.38 | 2 01 | |
| 10 hours, double team, @ 62½c. | 6 25 | |
| Extra work — Build box culvert to drain adjacent marsh land: | | |
| Box culvert furnished and built | 120 00 | |
| | | \$19,272 12 |
| Less amount paid in 1911, | \$5,661 00 | |
| Less amount paid in 1912, | 12,658 48 | |
| | <u>\$18,319 48</u> | |
| Less amount paid in 1911 and 1912 | 18,319 48 | |
| | | \$952 64 |
| Amount paid to John Kelly Company: | | |
| Execution of court | 1,147 36 | |
| | | <u>\$2,100 00</u> |

Harvard street, from Morton street to Deering road. (Unfinished work from 1915.)

| | | |
|---------------------------|--------|-----------------|
| Engineering | \$8 50 | |
| Advertising | 2 03 | |
| Lumber | 1 34 | |
| Labor, roadway excavating | 94 17 | |
| Teaming | 389 45 | |
| | | <u>\$495 49</u> |

Harwood street, from Willowwood street to Lucerne street. Length, 725 linear feet. Area, 2,122 square yards. Edgestone set, roadway paved with asphalt on a concrete base and artificial stone sidewalks constructed. (Work unfinished.)

| | | |
|--|----------|-------------------|
| Engineering | \$77 66 | |
| Inspection | 184 47 | |
| Engineering expense | 2 40 | |
| Advertising | 11 44 | |
| Edgestone, 1,390 feet straight, 64 feet circular and 2 small corners | 900 77 | |
| Lumber | 1 82 | |
| Labor, making templets | 5 00 | |
| Labor, handling stock | 16 96 | |
| Teaming | 2 50 | |
| Amount paid James Doherty, under contract: | | |
| Removing trees, etc. | \$10 00 | |
| 700 cubic yards earth excavation @ 40c. | 280 00 | |
| 39 cubic yards water box excavation @ \$1 | 39 00 | |
| | | <u>\$1,203 02</u> |
| <i>Carried forward</i> | \$329 00 | |

| | | |
|--|-------------------|-------------------|
| <i>Brought forward</i> | \$329 00 | \$1,203 02 |
| 2 cubic yards rock excavation @ \$5 | 10 00 | |
| 1,350 linear feet straight edgestone and corners hauled and set @ 18c. | 243 00 | |
| 64 linear feet circular edgestone set @ 11c. | 7 04 | |
| 34 linear feet existing edgestone reset @ 11c. | 3 74 | |
| 15 square yards existing granite block paving relaid, grout joints, @ 40c, | 6 00 | |
| 6 square yards paving relaid, grout joints, including concrete base, @ \$1.20 | 7 20 | |
| 2,112 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$2.22 | 4,688 64 | |
| 5,000 square feet artificial stone sidewalks furnished and laid (unfinished) @ 7c., | 350 00 | |
| 7 covers reset @ \$3 | 21 00 | |
| | <u>\$5,665 62</u> | |
| Less 15 per cent retained | 849 84 | |
| | | <u>4,815 78</u> |
| | | <u>\$6,018 80</u> |
| Credit: Flagging, old, North River | 14 22 | |
| | | <u>\$6,004 58</u> |
| <i>Haslet street, from Amherst street to Metcalf street. (Work done in 1915.)</i> | | |
| Engineering expense | | <u>\$0 30</u> |
| <i>Helen street, from Talbot avenue to Bernard street. (Work done in 1915.)</i> | | |
| Sand | \$112 25 | |
| Gravel | 3 92 | |
| Chemical analysis of asphalt | 4 00 | |
| | | <u>\$120 17</u> |
| <i>Herbert street, from Park street to West Tremlett street. (Work done in 1915.)</i> | | |
| Engineering expense | | <u>\$0 15</u> |
| <i>Hillcrest street, from Elgin street to Temple street. Straight edgestone set, artificial stone sidewalks constructed and concrete base laid. (Work unfinished.)</i> | | |
| Engineering | \$120 31 | |
| Inspection | 122 47 | |
| Engineering expense | 2 60 | |
| Edgestone, 935 feet straight and 2 small corners | 680 56 | |
| Labor, chemist | 5 11 | |
| Labor, handling stock | 14 12 | |
| | | <u>\$945 17</u> |
| <i>Carried forward</i> | | |

| | | | |
|---|-------------------|-----------------|--------------------------|
| <i>Brought forward</i> | | \$945 17 | |
| Amount paid Central Construction Company, under contract: | | | |
| 800 cubic yards earth excavation @ 55c. | \$440 00 | | |
| 920 linear feet straight edgestone and corners hailed and set @ 17c., | 156 40 | | |
| 1,450 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid (unfinished) @ 68c. | 986 00 | | |
| 5,500 square feet artificial stone sidewalks furnished and laid @ 11½c. | 646 25 | | |
| | <u>\$2,228 65</u> | | |
| Less 15 per cent retained . | 334 30 | | |
| | | <u>1,894 35</u> | |
| | | | <u><u>\$2,839 52</u></u> |
| <i>Hill Top street, from Granite avenue to Hallet street. Roadway rough graded. (Work unfinished.)</i> | | | |
| Engineering | | \$214 02 | |
| Inspection | | 145 00 | |
| Engineering expense | | 3 80 | |
| Advertising | | 75 | |
| Edgestone, 302 feet 6 inches straight | | 217 80 | |
| Teaming | | 371 25 | |
| Amount paid Martino DeMatteo, under contract: | | | |
| 1,800 cubic yards earth excavation @ 75c. | \$1,350 00 | | |
| 800 cubic yards filling furnished @ \$1 | 800 00 | | |
| | <u>\$2,150 00</u> | | |
| Less 15 per cent retained . | 322 50 | | |
| | | <u>1,827 50</u> | |
| | | | <u><u>\$2,780 12</u></u> |
| <i>Homestead street, from Elm Hill avenue to Humboldt avenue. Edgestone set, roadway rough graded and artificial stone sidewalks partly constructed. (Work unfinished.)</i> | | | |
| Engineering | | \$177 81 | |
| Inspection | | 137 07 | |
| Engineering expense | | 7 35 | |
| Advertising | | 3 13 | |
| Edgestone, 2,125 feet 2 inches straight and 2 small corners | | 1,537 42 | |
| Lumber | | 84 | |
| Labor, making templets | | 6 50 | |
| Labor, handling stock | | 29 00 | |
| Amount paid to Central Construction Company, under contract: | | | |
| 1,000 cubic yards earth excavation @ 55c. | \$550 00 | | |
| | <u>\$550 00</u> | | |
| <i>Carried forward</i> | | <u>1,899 12</u> | |

PUBLIC WORKS DEPARTMENT.

245

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| <i>Brought forward</i> | \$550 00 | \$1,899 12 |
| 21 cubic yards water box excavation @ \$2 | 42 00 | |
| 1 cubic yard rock excavation @ \$5 | 5 00 | |
| 1,800 linear feet straight edgestone and corners hauled and set @ 18c. | 324 00 | |
| 19 linear feet existing edgestone reset @ 10c. | 1 90 | |
| 5,570 square feet artificial stone sidewalks furnished and laid (unfinished) @ 9c., | 501 30 | |
| 8 covers reset @ \$3 | 24 00 | |
| | <hr/> | |
| | \$1,448 20 | |
| Less 15 per cent retained | 217 23 | |
| | <hr/> | |
| | 1,230 97 | |
| | | <hr/> |
| | | \$3,130 09 |

Hubert street, from Shawmut avenue to Westminster street. Length, 450 linear feet. Area, 1,275 square yards. Edgestone set, roadway paved with asphalt pavement on a concrete base and artificial stone sidewalks constructed.

| | |
|--|------------|
| Engineering | \$150 12 |
| Inspection | 146 84 |
| Engineering expense | 7 10 |
| Advertising | 3 13 |
| Edgestone, 150 feet straight | 108 00 |
| Lumber | 1 82 |
| Labor, making templets | 7 50 |
| Labor, handling stock | 2 25 |
| Amount paid Central Construction Company, under contract: | |
| 466 cubic yards earth excavation @ 55c. | \$256 30 |
| 149 linear feet straight edgestone and corners hauled and set @ 18c. | 26 82 |
| 38 linear feet circular edgestone set @ 11c. | 4 18 |
| 740 linear feet existing edgestone reset @ 10c. | 74 00 |
| 1,275 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$1.60 | 2,040 00 |
| 20 square yards existing brick sidewalks relaid @ 30c., | 6 00 |
| 4,705 square feet artificial stone sidewalks furnished and laid @ 12½c. | 588 13 |
| | <hr/> |
| | \$2,995 43 |
| Less 15 per cent retained, | 449 31 |
| | <hr/> |

2,546 12

\$2,972 88

26 00

\$2,946 88

Credit: Blocks, 1,300 old granite

Intervale street, from Columbia road to Normandy street. (Work done in 1915.)

Engineering expense \$0 15

Jones avenue, from Mascot street to Ballou avenue. Length, 993 linear feet. Asphalt pavement laid on a 6-inch Portland cement concrete base. Edgestone set and artificial stone sidewalks constructed.

| | |
|--|----------|
| Engineering | \$131 51 |
| Inspection | 166 54 |
| Engineering expense | 4 20 |
| Advertising | 3 25 |
| Edgestone, 689 feet straight | 403 02 |
| Blocks, 330 old granite | 6 60 |
| Lumber | 2 73 |
| Labor, handling stock | 10 33 |
| Teaming | 1 25 |

Amount paid James Doherty, under contract:

| | |
|--|----------|
| Removing trees, bushes, etc. | \$20 00 |
| 672 cubic yards earth excavation @ 37c. | 248 64 |
| 57 cubic yards water box excavation @ \$1 | 57 00 |
| 22 cubic yards rock excavation @ \$5 | 110 00 |
| 800 cubic yards gravel filling furnished @ 45c. | 360 00 |
| 1,870 linear feet straight edgestone and corners hauled and set @ 16c., | 299 20 |
| 35 linear feet circular edgestone set @ 12c. | 4 20 |
| 78 linear feet existing edgestone reset @ 11c. | 8 58 |
| 24 square yards existing granite block paving relaid @ 40c. | 9 60 |
| 2 square yards existing granite block paving relaid, grout joints, including concrete base, @ \$1.20 | 2 40 |
| 2,890 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$2.23 | 6,444 70 |
| 11,939 square feet artificial stone sidewalks furnished and laid @ 10c. | 1,193 90 |
| 278 square feet artificial stone driveways furnished and laid @ 10c. | 27 80 |
| 16 covers reset @ \$3 | 48 00 |
| Extra work — Build temporary fence as directed: | |
| 40 hours' labor @ 25c. | 10 00 |
| 8 hours, carpenter, @ 50c., | 4 00 |

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|---------------------------|------------|----------|
| Carried forward | \$8,848 02 | \$729 43 |
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| <i>Brought forward</i> | \$8,848 02 | \$729 43 |
| 8 hours, foreman, @ 62½c., | 5 00 | |
| Plus 15 per cent on \$19 | 2 85 | |
| 10 posts @ 40c. | 4 00 | |
| 170 feet B. M. spruce @ 3c. | 5 10 | |
| 10 pounds nails @ 5c. | 50 | |
| Teaming | 35 | |
| Extra work — Raise man- hole at White terrace: | | |
| 8 hours, mason, @ 62½c. | 5 00 | |
| 8 hours, tender, @ 30c. | 2 40 | |
| 8 hours, labor @ 30c. | 2 40 | |
| Plus 15 per cent on \$9.80, | 1 47 | |
| 375 bricks @ \$10 per M. | 3 75 | |
| 6 bags cement @ 50c. | 3 00 | |
| 6 cubic feet sand @ 5c. | 30 | |
| | <hr/> | |
| | 8,884 14 | \$9,613 57 |
| | | <hr/> |
| <i>Jones avenue</i> , footway, from Norfolk street to Ballou avenue. (Work not started.) | | |
| Engineering | | <u>\$227 68</u> |
| <i>Juliette street</i> , from Fox street to Homes avenue. (Work done in 1915.) | | |
| Engineering expense | | <u>\$0 45</u> |
| <i>Kenney street</i> , from Day street 500 feet northwesterly. (Work done in 1915.) | | |
| Chemical analysis | | <u>\$4 00</u> |
| <i>Kenton street</i> , from Washington street easterly. (Work not started.) | | |
| Engineering expense | \$61 33 | |
| Advertising | 2 57 | |
| | <hr/> | <u>\$63 90</u> |
| <i>Kittredge street</i> , from Cornell street to Beach street. Length, 549 linear feet. Roadway paved with bitulithic pavement on a 6-inch Portland cement concrete base. Edgestone set and artificial stone sidewalks constructed. | | |
| Engineering | \$110 92 | |
| Inspection | 255 50 | |
| Engineering expense | 1 95 | |
| Advertising | 9 40 | |
| Edgestone, 1,008 feet 6 inches straight, 6 small corners and 37 feet 7 inches circular | 653 62 | |
| Blocks | 6 60 | |
| Lumber | 3 64 | |
| Labor, handling stock | 15 29 | |
| Amount paid to Charles J. Jacobs Company, under contract: | | |
| Removing trees, bushes, etc. | \$0 00 | |
| 894 cubic yards earth excava- tion @ 40c. | 357 60 | |
| 3 cubic yards rock excava- tion @ \$5 | 15 00 | |
| | <hr/> | |
| <i>Carried forward</i> | \$372 60 | \$1,056 92 |

| | | |
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| <i>Brought forward</i> | \$372 60 | \$1,056 92 |
| 1,028 linear feet straight edge-stone and corners hauled and set @ 20c. | 205 60 | |
| 38 linear feet circular edge-stone set @ 15c. | 5 70 | |
| 16 linear feet existing edge-stone reset @ 15c. | 2 40 | |
| 9 square yards existing granite block paving relaid @ 40c. | 3 60 | |
| 10 square yards granite block paving hauled and laid, grout joints, including concrete base, @ \$1.50, | 15 00 | |
| 1,588 square yards concrete base and bitulithic wearing surface furnished and laid @ \$2.20 | 3,493 60 | |
| 6,641 square feet artificial stone sidewalks furnished and laid @ 10½c. | 697 31 | |
| 167 square feet artificial stone driveways furnished and laid @ 12½c. | 20 88 | |
| 9 covers reset @ \$3 | 27 00 | |
| Extra work — Regulate manhole cover over six (6) inches: | | |
| 3 hours, mason, @ 75c. | 2 25 | |
| 2½ hours, labor @ 30c. | 75 | |
| Plus 15 per cent on \$3 | 45 | |
| 75 brick @ \$12 per M. | 90 | |
| 1½ bags cement @ 60c. | 90 | |
| 4 cubic feet sand @ 5c. | 20 | |
| 3 square yards concrete base @ \$1 | 3 00 | |
| Extra work — Haul circular edgestone from the corner of Cornell and Washington streets: | | |
| ½ day, foreman, @ \$5 | 83 | |
| ½ day's labor @ \$2.40 | 2 10 | |
| Plus 15 per cent on \$2.93 | 44 | |
| ½ day, double team, @ \$6 | 2 00 | |
| | <hr/> | 4,857 51 |
| | | <hr/> <u>\$5,914 43</u> |
| <i>Langley road, from Breck avenue 571 feet easterly. (Work not started.)</i> | | |
| Engineering | \$29 83 | |
| Advertising | 75 | |
| | <hr/> | <u>\$30 58</u> |
| <i>Lithgow street, between Talbot avenue and Wainwright street. Length, 683 linear feet. Area, 2,036 square yards. Edgestone set and street rough graded. (Unfinished.)</i> | | |
| Engineering | \$115 92 | |
| Inspection | 54 67 | |
| Advertising | 1 08 | |
| | <hr/> | |
| <i>Carried forward</i> | \$171 67 | |

PUBLIC WORKS DEPARTMENT.

249

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|--|-------------------|-------------------|--|
| <i>Brought forward</i> | | \$171 67 | |
| Engineering expense | | 3 85 | |
| Edgestone, 900 feet straight and 2 small corners | | 655 30 | |
| Labor, handling stock | | 13 59 | |
| Amount paid Thomas H. Corrigan, under contract: | | | |
| 820 cubic yards earth excavation made and used on Lithgow street @ 35c. | \$287 00 | | |
| 2,550 cubic yards earth excavation made and hauled to Hill Top street @ 59c. | 1,504 50 | | |
| 60 cubic yards rock excavation @ \$5 | 300 00 | | |
| | <u>\$2,091 50</u> | | |
| Less amount paid in 1915, | 1,730 45 | | |
| | | 361 05 | |
| Amount paid Central Construction Company, under contract: | | | |
| 500 cubic yards earth excavation @ 55c. | \$275 00 | | |
| 890 linear feet straight edgestone and corners hauled and set @ 18c. | 160 20 | | |
| 20 linear feet circular edgestone set @ 11c. | 2 20 | | |
| 300 linear feet existing edgestone reset @ 10c. | 30 00 | | |
| | <u>\$467 40</u> | | |
| Less 15 per cent retained | 70 11 | | |
| | | 397 29 | |
| | | <u>\$1,602 75</u> | |
| <i>Lorenzo street, from Walnut street to Woodworth street. (Work done in 1915.)</i> | | | |
| Engineering expenses | | <u>\$0 10</u> | |
| <i>Lorette street, from Centre street to Hillcrest street. Straight edgestone set, artificial stone sidewalks constructed and roadway paved with asphalt on a concrete base.</i> | | | |
| Engineering | | \$100 71 | |
| Inspection | | 110 63 | |
| Engineering expense | | 3 55 | |
| Edgestone, 960 feet straight, 1 small corner and 40 feet circular | | 730 85 | |
| Blocks | | 4 30 | |
| Lumber | | 3 11 | |
| Labor, chemist | | 5 11 | |
| Labor, making templets | | 5 00 | |
| Labor, handling stock | | 14 45 | |
| Teaming | | 21 33 | |
| Amount paid Central Construction Company, under contract: | | | |
| 680 cubic yards earth excavation @ 55c. | \$374 00 | | |
| <i>Carried forward</i> | \$374 00 | \$999 04 | |

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|---|------------|-------------------|
| <i>Brought forward</i> | \$374 00 | \$999 04 |
| 960 linear feet straight edge-stone and corners hauled and set @ 17c. | 163 20 | |
| 40 linear feet circular edge-stone set @ 15c. | 6 00 | |
| 3 square yards existing granite block paving relaid, grout joints, including concrete base, @ \$1.25, | 3 75 | |
| 1,400 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$1.58, | 2,212 00 | |
| 6,000 square feet artificial stone sidewalks furnished and laid @ 11½c. | 705 00 | |
| 4 covers reset @ \$3 | 12 00 | |
| | <hr/> | |
| | \$3,475 95 | |
| Less 15 per cent retained | 521 39 | |
| | <hr/> | |
| | | 2,954 56 |
| | | <hr/> |
| | | <u>\$3,953 60</u> |

Lorne street, from Harvard street northwesterly. (Work not started.)

| | | |
|---------------------|----------|-----------------|
| Engineering | \$101 43 | |
| Engineering expense | 1 20 | |
| Advertising | 4 62 | |
| | <hr/> | |
| | | <u>\$107 25</u> |

Lucas street, between Washington street and Shawmut avenue. Length, 327 linear feet. Area, 254 square yards. Roadway paved with scoria blocks on a concrete base, edgestone set and artificial stone sidewalks laid. (Unfinished work from 1915.)

| | | |
|---|----------|-----------------|
| Engineering | \$11 71 | |
| Inspection | 14 00 | |
| Engineering expense | 35 | |
| Amount paid to John Kelly Company, under contract: | | |
| 920 square feet artificial stone sidewalks furnished and laid @ 14½c. | \$133 40 | |
| 7.1 cubic yards extra concrete furnished and placed @ \$3.50 | 24 85 | |
| | <hr/> | |
| | | 158 25 |
| | | <hr/> |
| | | <u>\$184 31</u> |

Lyford street, from Woodrow avenue to Franklin Field. (Work done in 1915.)

| | | |
|---|--------|----------------|
| Engineering | \$7 19 | |
| Inspection | 10 50 | |
| Engineering expense | 10 | |
| Amount paid to Charles J. Jacobs Company, under contract: | | |
| Final payment on contract, being balance due, | 63 17 | |
| | <hr/> | |
| | | <u>\$80 96</u> |

Matchett street, from Washington street 843 feet northeasterly. Length, 852 linear feet. Area, 9,959 square feet. Edgestone was set and artificial stone sidewalks constructed. (Work unfinished.)

| | | |
|--|------------|-------------------|
| Engineering | \$60 35 | |
| Inspection | 102 50 | |
| Engineering expense | 3 05 | |
| Advertising | 9 10 | |
| Edgestone | 29 41 | |
| Nails | 2 75 | |
| Lumber | 79 19 | |
| Gravel | 1 00 | |
| Labor, edgestone setting | 18 12 | |
| Teaming | 25 51 | |
| Amount paid Charles J. Jacobs Company, under contract: | | |
| 9,831 square feet artificial stone sidewalks furnished and laid @ 13c. | \$1,278 03 | |
| 128 square feet artificial stone driveways furnished and laid @ 15c. | 19 20 | |
| Extra work — Remove edgestone already set and construct new drive- ways: | | |
| 4 hours, paver, @ 62½c. | 2 50 | |
| 15 hours' labor @ 35c. | 5 25 | |
| Plus 15 per cent on \$7.75 | 1 16 | |
| 1 day, double team, @ \$6 | 6 00 | |
| | <hr/> | |
| | 1,312 14 | |
| | | <u>\$1,643 12</u> |

Melvinside terrace, from Dorchester avenue to Minton street. (Work done in 1915.)

| | |
|-------------------------------|---------------|
| Engineering expense | <u>\$0 10</u> |
|-------------------------------|---------------|

Mendon Park, from Bourneside street to Upland avenue. (Work not started.)

| | |
|-----------------------|---------------|
| Advertising | <u>\$9 00</u> |
|-----------------------|---------------|

Minton street, from Amory street to Brookside avenue. (Work not started.)

| | | |
|-------------------------------|---------|----------------|
| Engineering | \$38 50 | |
| Engineering expense | 1 15 | |
| | <hr/> | |
| | | <u>\$39 65</u> |

Montebello road, from Forest Hills street to Walnut avenue. Length, 1,087 linear feet. Area, 3,060 square yards. Edgestone set, bitulithic pavement laid and artificial stone sidewalks constructed.

| | | |
|---|----------|--|
| Engineering | \$159 14 | |
| Inspection | 273 00 | |
| Engineering expense | 3 80 | |
| Edgestone, 404 feet straight, 12 feet cir- cular and 4 small corners | 266 99 | |
| Blocks | 4 60 | |
| Crushed stone | 21 32 | |
| Lumber | 2 58 | |
| Steam roller | 13 00 | |
| | <hr/> | |

Carried forward \$744 43

| | | |
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| <i>Brought forward</i> | | \$744 43 |
| Labor, handling stock | | 5 81 |
| Labor, making templets | | 8 25 |
| Teaming | | 50 00 |
| Labor, spreading stone and excavating roadway | | 85 02 |
| Amount paid to Martino DeMatteo, under contract: | | |
| Removing trees, etc. | \$1 00 | |
| 1,154 cubic yards earth excavation @ 40c. | 461 60 | |
| 144 cubic yards rock excavation @ \$3.50 | 504 00 | |
| 2,120 linear feet straight edge-stone and corners hauled and set @ 16c. | 339 20 | |
| 23 linear feet circular edge-stone set @ 12c. | 2 76 | |
| 41 linear feet existing edge-stone reset @ 12c. | 4 92 | |
| 6 square yards existing granite block paving relaid, gravel joints, @ 35c. | 2 10 | |
| 5 square yards granite block paving hauled and laid, grout joints, including concrete base, @ 00c. | 00 | |
| 6 square yards existing flagging crosswalks relaid, gravel joints, @ 35c. | 2 10 | |
| 3,051 square yards bitulithic wearing surface furnished and laid, including concrete base, @ \$2.13 | 6,498 63 | |
| 10 square yards existing brick sidewalks relaid @ 35c. | 3 50 | |
| 5,080 square feet artificial stone sidewalks furnished and laid @ 11c. | 558 80 | |
| 365 square feet artificial stone driveway furnished and laid @ 12c. | 43 80 | |
| 17 covers reset @ \$3 | 51 00 | |
| 468 square yards loam space graded and seeded @ 9c. | 42 12 | |
| 77 cubic yards loam furnished and placed @ 75c. | 57 75 | |
| Extra work — Remove cinders already placed: | | |
| 1½ days, foreman, @ \$4 | 4 50 | |
| 8½ days' labor @ \$2.75 | 22 69 | |
| Plus 15 per cent on \$27.19 | 4 08 | |
| 2½ days, double team, @ \$6 | 12 75 | |
| <i>Carried forward</i> | \$8,617 30 | \$893 51 |

PUBLIC WORKS DEPARTMENT.

253

| | | |
|------------------------------------|------------|-------------------|
| <i>Brought forward</i> | \$8,617 30 | \$893 51 |
| 7 D. H. cinders @ \$2.75 | 19 25 | |
| | <hr/> | |
| | \$8,636 55 | |
| Less amount paid in | | |
| 1915 | 626 79 | |
| | <hr/> | |
| | | 8,009 76 |
| | | <hr/> |
| | | <u>\$8,903 27</u> |

Moraine street, from South Huntington avenue to Jamaica way. (Work not started.)

| | | |
|-------------------------------|----------|--------|
| Engineering | \$184 61 | |
| Engineering expense | 80 | |
| Advertising | 4 35 | |
| Labor, stonemason | 42 00 | |
| | <hr/> | |
| | | 231 76 |
| | | <hr/> |

Moreland street, from Dennis street to Brook avenue. (Work not started.)

| | |
|-----------------------|--------|
| Engineering | \$8 95 |
|-----------------------|--------|

Morton street, from Norfolk street to Midland Division, New York, New Haven & Hartford Railroad Bridge. Length, 466 linear feet. Area, 2,712 square yards. Edgestone set and bituminous macadam roadway constructed by department force; 1,538 cubic yards filling furnished and artificial stone walks constructed by contract. (Work unfinished.)

| | |
|--|------------|
| Engineering | \$174 81 |
| Inspection | 63 47 |
| Engineering expense | 5 80 |
| Advertising | 6 54 |
| Nails | 25 |
| Edgestone, 479 feet straight and 30 feet | |
| 8½-inch circular | 370 29 |
| Road oil, 6,089 gallons | 1,094 94 |
| Filling | 19 00 |
| Crushed stone, 894 tons | 1,155 22 |
| Lumber | 9 39 |
| Gravel | 21 29 |
| Steam roller | 249 00 |
| Labor, handling stock | 2 09 |
| Removing trees | 50 00 |
| Labor, edgestone excavating | 113 32 |
| Labor, edgestone setting | 156 63 |
| Labor, roadway excavating | 73 77 |
| Labor, roadway, spreading stone | 456 33 |
| Labor, gravel and crushed stone sidewalks | 36 26 |
| Labor, repairing fence and bulkhead | 19 58 |
| Labor, building fence | 108 66 |
| Labor, building plank walks | 65 50 |
| Teaming | 540 35 |
| Amount paid William J. Rafferty & Co., under contract: | |
| 7,499 square feet artificial stone | |
| sidewalks furnished and | |
| laid @ 17½c. | \$1,331 07 |
| 15 per cent retained | 199 66 |
| | <hr/> |
| | 1,131 41 |
| | <hr/> |
| <i>Carried forward</i> | \$5,923 90 |

| | | |
|--|------------|-------------------|
| <i>Brought forward</i> | | \$5,923 90 |
| Amount paid to William J. Barry, under contract: | | |
| 1,538 cubic yards filling furnished @ 69c. | \$1,061 22 | |
| 15 per cent retained | 159 18 | |
| | | 902 04 |
| | | <u>\$6,825 94</u> |
| Credit: Blocks, 2,925 old granite | | 58 50 |
| | | <u>\$6,767 44</u> |
| <i>Mt. Ida road, from Marie street to Ronan park. Rough graded roadway. (Work unfinished.)</i> | | |
| Engineering | \$49 68 | |
| Engineering expense | 95 | |
| Edgestone, 250 feet 1 inch straight | 180 06 | |
| Labor, handling stock | 3 75 | |
| Labor, excavating roadway | 1,081 72 | |
| Teaming | 301 95 | |
| | | <u>\$1,618 11</u> |
| <i>Neptune road, from Bennington street to Boston, Revere Beach & Lynn Railroad. (Work not started.)</i> | | |
| Engineering | \$324 92 | |
| Engineering expense | 3 30 | |
| Advertising | 4 60 | |
| | | <u>\$332 82</u> |
| Credit: Old blocks | 8 00 | |
| | | <u>\$324 82</u> |
| <i>Nevada street, from Wilmington avenue to Fairmount street. (Work not started.)</i> | | |
| Engineering | | <u>\$4 50</u> |
| <i>Normandy street, from Intervale street to Devon street. Length, 490 linear feet. Area, 1,413 square yards. Asphalt roadway constructed, and artificial stone sidewalks constructed by contractor. Edgestone set and roadway rough graded.</i> | | |
| Engineering | \$50 36 | |
| Inspection | 84 50 | |
| Engineering expense | 85 | |
| Advertising | 3 12 | |
| Chemical analysis | 7 60 | |
| Steam roller | 45 50 | |
| Gravel | 5 88 | |
| Labor, excavating roadway | 566 62 | |
| Teaming | 262 50 | |
| Amount paid Central Construction Company, under contract: | | |
| 300 cubic yards earth excavation @ 55c. | \$165 00 | |
| 1,413 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$1.60 | 2,260 80 | |
| | | <u>\$2,425 80</u> |
| Carried forward | | \$1,028 93 |

PUBLIC WORKS DEPARTMENT.

255

| | | | |
|---|-------------------|------------|-------------------|
| <i>Brought forward</i> | \$2,425 80 | \$1,026 93 | |
| 550 square feet artificial stone sidewalks furnished and laid @ 12½c. | 687 50 | | |
| 2 covers reset @ \$3 | 6 00 | | |
| | <u>\$3,119 30</u> | | |
| Less 15 per cent retained | 467 90 | | |
| | | 2,651 40 | |
| | | | <u>\$3,678 33</u> |
| <i>North Beacon street, from Cambridge street to Market street. (Work not started.)</i> | | | |
| Engineering | | \$223 08 | |
| Advertising | | 2 03 | |
| | | | <u>\$225 11</u> |
| <i>Oakland street, from River street to Rockdale street. (Work done in 1915.)</i> | | | |
| Engineering expense | | | <u>\$0 45</u> |
| <i>Orchardfield street, from Dorchester avenue to Freeport street. Length, 814 linear feet. Area, 1,270 square yards. Edgestone set, roadway paved with asphalt. (Work unfinished.)</i> | | | |
| Engineering | | \$74 95 | |
| Inspection | | 128 31 | |
| Engineering expense | | 3 25 | |
| Advertising | | 3 12 | |
| Edgestone, 1,500 feet straight, 2 large corners and 35.4 feet circular | | 1,140 44 | |
| Lumber | | 3 15 | |
| Labor, making templets | | 6 50 | |
| Labor, handling stock | | 18 44 | |
| Labor, relaying brick walks | | 9 00 | |
| Teaming | | 5 00 | |
| Amount paid Central Construction Company, under contract: | | | |
| 550 cubic yards earth excavation @ 55c. | \$302 50 | | |
| 1,500 linear feet straight edgestone and corners hauled and set @ 18c. | 270 00 | | |
| 37 linear feet circular edgestone set @ 11c. | 4 07 | | |
| 50 linear feet existing edgestone reset @ 10c. | 5 00 | | |
| 1,270 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$1.60, | 2,032 00 | | |
| 8 covers reset @ \$3 | 24 00 | | |
| | <u>\$2,637 57</u> | | |
| Less 15 per cent retained | 395 64 | | |
| | | 2,241 93 | |
| | | | <u>\$3,634 09</u> |
| Credit: Blocks, old crossing | | 11 38 | |
| | | | <u>\$3,622 71</u> |

Orleans street, from Gove street to Porter street. Length, 638 feet. Area, 2,482 square yards. One thousand one hundred and eighty-five square yards roadway excavated; 1,466 square yards concrete base laid, 6 inches deep; 2,508 square yards granite block paving and crosswalk laid with cement grout joints; 550 square yards gravel and 343 square yards crushed stone sidewalks. (Unfinished work from 1915.)

| | |
|--|-------------------|
| Engineering | \$12 82 |
| Lumber | 25 22 |
| Blocks, 55,147 granite | 2,867 64 |
| Bricks, 12,500 sidewalk | 156 25 |
| Cement, 536 barrels Portland | 857 03 |
| Gravel, 51 cubic yards | 51 00 |
| Sand, 528 cubic yards | 568 32 |
| Crushed stone, 310.38 tons | 433 03 |
| Gasolene and oil | 14 45 |
| Labor, sidewalk excavation | 40 67 |
| Labor, brick sidewalk laying | 42 95 |
| Labor, spreading stone and gravel on sidewalks | 70 68 |
| Labor, edgestone resetting | 4 75 |
| Labor, crosswalk excavating | 13 92 |
| Labor, crosswalk laying | 10 88 |
| Labor, making concrete base | 390 12 |
| Labor, roadway excavating | 463 27 |
| Labor, roadway paving | 1,259 96 |
| Teaming | 317 50 |
| | <hr/> |
| | \$7,600 46 |

Overland street, from Brookline street to Boston & Albany Railroad. (Work not started.)

| | |
|-------------------------------|-----------------|
| Engineering | \$112 75 |
| Engineering expense | 1 10 |
| | <hr/> |
| | \$113 85 |

Parkman road, from Perkins street to Perkins street. Five hundred and three feet circular edgestone set, 1,174 feet straight edgestone set, 394 feet straight edgestone reset, 2,052 square yards concrete roadway, 6 inches deep, constructed and 1,479 linear feet block gutters laid. (Work unfinished.)

| | |
|--|----------|
| Engineering | \$141 25 |
| Inspection | 4 00 |
| Advertising | 1 10 |
| Steam roller, rolling | 39 00 |
| Steam roller, picking | 104 00 |
| Blocks, old granite | 155 40 |
| Engineering expense | 4 90 |
| Crushed stone, 399 tons | 433 51 |
| Hydrated lime, 8 tons | 100 00 |
| Expansion joint, 600 feet | 30 34 |
| Edgestone, 118 feet 8 inches straight, 1 small corner and 526 feet 6 inches circular | 1,362 23 |
| Cement, 519 barrels | 1,028 50 |
| Sand, 233 cubic yards | 228 34 |
| Lumber | 71 13 |
| Wire mesh | 70 35 |
| Gasolene | 7 40 |
| Canvas | 79 05 |
| Tar paper | 10 11 |
| | <hr/> |

Carried forward **\$3,870 61**

| | | |
|---|------------|-------------------|
| <i>Brought forward</i> | \$3,870 61 | |
| Pipe, iron, steel, etc., for templet | 32 54 | |
| Labor, making templets | 5 50 | |
| Labor, handling stock | 19 45 | |
| Labor, edgestone excavating | 717 69 | |
| Labor, edgestone setting | 509 29 | |
| Labor, excavating roadway | 850 88 | |
| Labor, laying concrete and mixing | 2,536 50 | |
| Labor, gravel sidewalks | 46 41 | |
| Concrete mixers, hire of | 322 00 | |
| Teaming | 732 75 | |
| | <hr/> | |
| | \$9,643 62 | |
| Credit: Old flagging | 6 84 | |
| | <hr/> | |
| | | <u>\$9,636 78</u> |
| <i>Patten street, from Hyde Park avenue to Bourne street. (Work not started.)</i> | | |
| Engineering | \$37 61 | |
| Advertising | 2 78 | |
| | <hr/> | |
| | | <u>\$40 39</u> |
| <i>Peacevale road, from Norfolk street to Dunbar avenue. (Work done in 1915.)</i> | | |
| Engineering expense | \$0 10 | |
| Chemical analysis | 4 00 | |
| | <hr/> | |
| | | <u>\$4 10</u> |
| <i>Percival street, from Fox street to Marie street. (Work done in 1915.)</i> | | |
| Engineering expense | | <u>\$0 15</u> |
| <i>Perham street, from Vermont street to the railroad. (Work not started.)</i> | | |
| Engineering | \$83 43 | |
| Advertising | 4 60 | |
| | <hr/> | |
| | | <u>\$88 03</u> |
| <i>Porter street, from Cottage street across Geneva street. (Work done in 1914.)</i> | | |
| Engineering | \$7 18 | |
| Engineering expense | 21 | |
| Advertising | 2 03 | |
| | <hr/> | |
| | | <u>\$9 42</u> |
| <i>Prince street, from Pond street to the Arborway. (Work done in 1915.)</i> | | |
| Chemical analysis | | <u>\$4 00</u> |
| <i>Public Alley No. 902, from Deerfield street to Raleigh street. (Work not started.)</i> | | |
| Engineering | \$57 00 | |
| Engineering expense | 50 | |
| Advertising | 3 25 | |
| | <hr/> | |
| | | <u>\$60 75</u> |

* *Public Alley No. 903*, from Haviland street to Public Alley No. 904. Length, 426 linear feet. Edgestone set, artificial stone sidewalks constructed and roadway paved with Hassam block pavement on a 6-inch Hassam concrete base.

| | | |
|---|------------|----------|
| Engineering | \$54 62 | |
| Inspection | 135 15 | |
| Engineering expense | 2 20 | |
| Advertising | 4 29 | |
| Edgestone, 551 feet straight and 21 feet circular | 348 78 | |
| Bricks | 6 25 | |
| Labor, handling stock | 5 68 | |
| Amount paid James Doherty, under contract: | | |
| Removing trees, bushes, etc., | \$0 50 | |
| 206 cubic yards earth excavation @ 67c. | 138 02 | |
| 546 linear feet straight edgestone hauled and set @ 17c. | 92 82 | |
| 14 linear feet circular edgestone set @ 14c. | 1 96 | |
| 26 linear feet existing edgestone reset @ 14c. | 3 64 | |
| 556 linear feet concrete backing for edgestone @ 16c. | 88 96 | |
| 10 square yards existing granite block paving relaid @ 40c. | 4 00 | |
| 403 square yards Hassam block pavement furnished and laid, including concrete base, with grout joints, @ \$3.05 | 1,229 15 | |
| 77 square feet artificial stone sidewalks furnished and laid @ 20c. | 15 40 | |
| 5 covers reset @ \$3 | 15 00 | |
| Extra work — Cut sheet piling left in sewer trench: | | |
| 38 hours' labor @ 30c. | 11 40 | |
| Plus 15 per cent on \$11.40 | 1 71 | |
| Extra work — Remove and construct driveways as directed: | | |
| 4 hours, stonecutter, @ 62½c., | 2 50 | |
| 4 hours, paver, @ 62½c. | 2 50 | |
| 41 hours' labor @ 30c. | 12 30 | |
| Plus 15 per cent on \$17.30 | 2 60 | |
| 12 hours, double team, @ 75c., | 9 00 | |
| 24 cubic feet concrete @ 18½c., | 4 44 | |
| 3 bags cement @ 50c. | 1 50 | |
| Extra work — Regulate catch-basin and manhole covers more than six (6) inches: | | |
| 4 hours, mason, @ 62½c. | 2 50 | |
| 4 hours' labor @ 30c. | 1 20 | |
| Plus 15 per cent on \$3.70 | 56 | |
| 50 bricks @ 1c. | 50 | |
| Carried forward | \$1,642 16 | \$556 97 |

* Done in connection with Public Alley No. 904.

PUBLIC WORKS DEPARTMENT.

259

| | | |
|---|------------|-------------------|
| <i>Brought forward</i> | \$1,642 16 | \$556 97 |
| 1½ bags cement @ 50c. . . . | 75 | |
| 5 cubic feet sand @ 5c. . . . | 25 | |
| | <hr/> | 1,643 16 |
| | | \$2,200 13 |
| Credit: Blocks, 3,150 old granite | | 63 00 |
| | | <hr/> |
| | | <u>\$2,137 13</u> |

* *Public Alley No. 904*, from Bickerstaff street to Public Alley No. 903. Length, 99 linear feet. Edgestone set, artificial stone sidewalks constructed and roadway paved with Hassam block pavement on a Hassam concrete base.

| | | |
|---|----------|--------|
| Engineering | \$40 68 | |
| Inspection | 73 50 | |
| Engineering expense | 30 | |
| Advertising | 4 29 | |
| Edgestone, 160 feet 6 inches straight and 21 feet circular | 120 39 | |
| Labor, handling stock | 1 34 | |
| Amount paid James Doherty, under contract: | | |
| Removing trees, bushes, etc., \$0 50 | | |
| 68 cubic yards earth excavation @ 67c. | 45 56 | |
| 159 linear feet straight edgestone and corners hauled and set @ 17c. | 27 03 | |
| 28 linear feet circular edgestone set @ 14c. | 3 92 | |
| 12 linear feet existing edgestone reset @ 14c. | 1 68 | |
| 185 linear feet concrete backing for edgestone @ 16c. | 29 60 | |
| 2 linear feet existing granite block paving relaid @ 40c. | 80 | |
| 96 linear feet Hassam block pavement furnished and laid, including concrete base and grout joints, @ \$3.05 | 292 80 | |
| 16 linear feet existing brick sidewalks relaid @ 30c. | 4 80 | |
| | <hr/> | 406 69 |
| Extra work — Cut sheet piling left in sewer trench: | | |
| 24 hours' labor @ 30c. | \$7 20 | |
| Plus 15 per cent on \$7.20 | 1 08 | |
| | <hr/> | 8 28 |
| Extra work — Regulate catch-basin and manhole covers more than six (6) inches: | | |
| 4 hours, mason, @ 62½c. | \$2 50 | |
| 4 hours' labor @ 30c. | 1 20 | |
| | <hr/> | 3 70 |
| Plus 15 per cent on \$3.70 | 55 | |
| 50 bricks @ 1c. | 50 | |
| 1½ bags cement @ 50c. | 75 | |
| 5 cubic feet sand @ 5c. | 25 | |
| | <hr/> | |
| <i>Carried forward</i> | \$661 22 | |

* Done in connection with Public Alley No. 903.

| | | | |
|--|--------|----------|-----------------|
| <i>Brought forward</i> | | \$661 22 | |
| Extra work — Lay flagging crosswalks with grout joints where directed on existing concrete base: | | | |
| 4 square yards flagging crosswalks laid @ 55c. | \$2 20 | | |
| 2 square yards granite block paving laid @ 55c. | 1 10 | | |
| | — | 3 30 | |
| | | | <u>\$664 52</u> |

Ralston street, from Dorchester avenue to Old Colony avenue. Filling furnished. (Work unfinished.)

| | | |
|------------------------------------|----------|-----------------|
| Engineering | \$156 58 | |
| Inspection | 69 03 | |
| Engineering expense | 6 15 | |
| Labor, spreading filling | 146 50 | |
| | — | <u>\$378 26</u> |

Randall street, from Albany street to Harrison avenue. Length, 636 linear feet. Area, 1,511 square yards. The edgestone and concrete base were furnished and laid by the department forces. The contractor furnished and laid the artificial stone sidewalk and put on an asphalt wearing surface. (Unfinished work from 1915.)

| | | |
|--|---------|------------|
| Engineering | \$90 00 | |
| Inspection | 133 00 | |
| Engineering expense | 3 95 | |
| Advertising | 3 14 | |
| Lumber | 3 82 | |
| Edgestone, 17 feet straight and 4 small corners | 17 10 | |
| Flagging, 139 feet 6 inches granite | 111 60 | |
| Crushed stone, 250.5 tons | 281 05 | |
| Cement, 217 barrels | 375 44 | |
| Sand, 125 cubic yards | 167 51 | |
| Gravel, 40 cubic yards | 32 48 | |
| Labor, handling stock | 2 18 | |
| Labor, street cleaning | 5 00 | |
| Labor, concrete base | 853 11 | |
| Labor on crushed stone walks | 62 25 | |
| Labor on roadway excavating | 340 19 | |
| Labor, edgestone excavating | 118 93 | |
| Labor, edgestone resetting | 173 04 | |
| Blocks | 12 50 | |
| Teaming | 124 75 | |
| Bitulithic repairs | 95 16 | |
| Amount paid Central Construction Company, under contract: | | |
| 56 square yards existing granite block paving relaid, gravel joints, @ 40c. | \$22 40 | |
| 24 square yards granite block paving hauled and laid, grout joints, including concrete base (unfinished), @ 90c. | 21 60 | |
| <i>Carried forward</i> | \$44 00 | \$3,006 20 |

PUBLIC WORKS DEPARTMENT.

261

| | | |
|--|-------------------|-------------------|
| <i>Brought forward</i> | \$44 00 | \$3,006 20 |
| 30 square yards flagging cross-walks hauled and laid, grout joints, including concrete base (unfinished), @ \$1 | 30 00 | |
| 35 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$1.60 | 56 00 | |
| 1,476 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid (unfinished) @ \$1.10 | 1,623 60 | |
| 5,468 square feet artificial stone sidewalks furnished and laid @ 12½c. | 683 50 | |
| | <u>\$2,437 10</u> | |
| Less 15 per cent retained, | 365 56 | |
| | | <u>2,071 54</u> |
| | | \$5,077 74 |
| Credit: Old edgestone and flagging | | <u>25 65</u> |
| | | <u>\$5,052 09</u> |
| <i>Raven street</i> , from Crescent avenue southerly. (Work done in 1915.) | | |
| Engineering expense | | <u>\$0 05</u> |
| <i>Redfield street</i> , from Port Norfolk street to Walnut street. (Work done in 1915.) | | |
| Engineering | \$8 50 | |
| Crushed stone, 91 tons | 109 38 | |
| Teaming | 16 50 | |
| | | <u>\$134 38</u> |
| <i>Richwood street</i> , from Centre street to Montview street. (Work not started.) | | |
| Engineering | \$22 32 | |
| Advertising | 2 56 | |
| Labor on plank walk | 46 00 | |
| | | <u>\$70 88</u> |
| <i>Ripley road</i> , from Vassar street to Harvard street. Length, 685 linear feet. Area, 1,980 square yards. Edgestone set, roadway paved with asphalt pavement on a concrete base and artificial stone sidewalks constructed. (Work unfinished.) | | |
| Engineering | \$106 60 | |
| Inspection | 156 75 | |
| Engineering expense | 4 05 | |
| Advertising | 3 12 | |
| Edgestone, 1,065 feet straight and 266 feet 9 inches circular | 1,102 96 | |
| Lumber | 1 92 | |
| Labor, making templates | 5 50 | |
| | | <u>\$1,380 90</u> |
| <i>Carried forward</i> | | |

| | | |
|--|----------|-------------------|
| <i>Brought forward</i> | | \$1,380 90 |
| Labor, handling stock | | 17 50 |
| Teaming | | 2 50 |
| Flagging, 102 feet 1 inch granite | | 81 67 |
| Amount paid Central Construction Company, under contract: | | |
| 800 cubic yards earth excavation @ 55c. | \$440 00 | |
| 1,050 linear feet straight edgestone and corners hauled and set @ 18c. | 189 00 | |
| 250 linear feet circular edgestone set (unfinished) @ 10c. | 25 00 | |
| 1,920 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$1.60 | 3,072 00 | |
| 6 covers reset @ \$3 | 18 00 | |
| | <hr/> | |
| | 3,744 00 | |
| Less 15 per cent retained, | 561 60 | |
| | <hr/> | |
| | | 3,182 40 |
| | | <hr/> |
| | | <u>\$4,664 97</u> |

Rosewood street, from Oakland street to Randolph road. Length, 1,529 linear feet. Area, 4,417 square yards. Edgestone set, roadway paved with asphalt on a concrete base and artificial stone sidewalks constructed. (Unfinished work from 1915.)

| | |
|---|------------|
| Engineering | \$217 99 |
| Inspection | 343 00 |
| Engineering expense | 3 95 |
| Advertising | 2 04 |
| Edgestone, 1,124 feet straight and 10 small corners | 672 97 |
| Lumber | 3 55 |
| Labor, handling stock | 17 37 |
| Teaming | 6 00 |
| Amount paid to John Kelly Company, under contract: | |
| Removing trees, etc. | \$25 00 |
| 2,062 cubic yards earth excavation @ 39c. | 804 18 |
| 39 cubic yards water box excavation @ 50c. | 19 50 |
| 172 cubic yards rock excavation @ \$2 | 344 00 |
| 2,997 linear feet straight edgestone and corners hauled and set @ 19c., | 569 43 |
| 19 linear feet circular edgestone set @ 10c. | 1 90 |
| 27 linear feet existing edgestone reset @ 10c. | 2 70 |
| 14 square yards existing granite block paving relaid, gravel joints, @ 25c. | 3 50 |
| | <hr/> |
| <i>Carried forward</i> | \$1,770 21 |
| | <hr/> |
| | \$1,266 87 |

| | | |
|--|--------------------|---------------------------|
| <i>Brought forward</i> | \$1,770 21 | \$1,286 87 |
| 7 square yards existing granite block paving relaid, grout joints, including concrete base, @ 70c. | 4 90 | |
| 4,405 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$2.19 | 9,646 95 | |
| 17,240 square feet artificial stone sidewalks furnished and laid @ 11c. | 1,896 40 | |
| 421 square feet artificial stone driveways furnished and laid @ 11c. | 46 31 | |
| 13 covers reset @ \$3 | 39 00 | |
| Extra work — Take out the existing edgestone at Nos. 8 and 20 and put in new driveway: | | |
| 8 hours, edgestone setter, @ 75c. | 6 00 | |
| 24 hours' labor @ 30c. | 7 20 | |
| Plus 15 per cent on \$13.20 | 1 98 | |
| 1 day, double team, @ \$6, | 6 00 | |
| Extra work — Remove edgestone already set at No. 12 and construct driveway: | | |
| 4 hours, edgestone setter, @ 75c. | 3 00 | |
| 8 hours' labor @ 30c. | 2 40 | |
| Plus 15 per cent on \$5.40, | 81 | |
| | <u>\$13,431 16</u> | |
| Less amount paid in 1915, | 696 49 | |
| | | 12,734 67 |
| | | <u>\$14,001 54</u> |
| Credit: Block, old granite, 5,150 | \$103 00 | |
| Flagging, old granite | 18 57 | |
| | | 121 57 |
| | | <u><u>\$13,879 97</u></u> |
| <i>Rowell street, from Hancock street to Cushing avenue. (Work not started.)</i> | | |
| Engineering | \$104 60 | |
| Engineering expense | 1 60 | |
| Advertising | 2 79 | |
| | | <u>\$108 99</u> |
| <i>Rugby road, from Randolph avenue to Oakland street. (Work not started.)</i> | | |
| Engineering | \$110 17 | |
| Engineering expense | 25 | |
| Advertising | 5 82 | |
| | | <u><u>\$116 24</u></u> |

St. Albans road, from Francis street to Huntington avenue. (Work done by department force unfinished.) One hundred and eighty-two feet circular edgestone set and reset, 1,107 feet straight edgestone set and reset, 686 square yards roadway excavated and stone foundation placed and 1,647 square yards roadway partly subgraded.

| | |
|--|---------|
| Engineering | \$99 22 |
| Engineering expense | 2 75 |
| Advertising | 2 05 |
| Edgestone, 970 feet straight, 180 feet circular and 2 small corners | 774 56 |
| Cement | 1 24 |
| Gravel | 16 93 |
| Steam roller | 162 50 |
| Labor, handling stock | 14 70 |
| Labor, edgestone excavating | 268 81 |
| Labor, edgestone resetting | 315 23 |
| Labor, roadway excavating | 956 62 |
| Labor, spreading stone | 130 38 |
| Labor, crushed stone walks | 94 42 |
| Teaming | 490 00 |
| Labor, crosswalk excavating | 11 17 |
| Labor, crosswalk relaying | 36 34 |

\$3,376 92

Credit: Blocks, old granite 7 80

\$3,369 12

St. Andrew road, from Bayswater street to Washburn avenue. Length, 1,202 linear feet. Area, 3,602 square yards. Asphalt macadam roadway constructed, edgestone set, granite block gutters paved, flagging crosswalks laid and artificial stone sidewalks constructed.

| | |
|-----------------------------------|--------|
| Engineering | \$8 61 |
| Regulating sewer covers | 12 00 |

Amount paid to James Doherty, under contract:

| | |
|---|--------|
| Removing trees, bushes, stumps, etc. | \$0 01 |
| 1,099 cubic yards earth excavation @ 53c. | 582 47 |
| 2,284 linear feet straight edgestone and corners set @ 9c. | 205 56 |
| 62 linear feet circular edgestone set @ 15c. | 9 30 |
| 51 linear feet existing edgestone reset @ 14c. | 7 14 |
| 46 square yards granite block paving hauled and laid @ 45c. | 20 70 |
| 36 square yards existing granite block paving relaid @ 50c. | 18 00 |
| 61 square yards flagging crosswalks hauled and laid @ 53c. | 32 33 |
| 26 square yards existing flagging crosswalks relaid @ 50c. | 13 00 |

Carried forward \$888 51 \$20 61

PUBLIC WORKS DEPARTMENT.

265

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|--|--------------------|---------|-------------------|
| <i>Brought forward</i> | \$888 51 | \$20 61 | |
| 3,433 square yards bituminous macadam surface furnished and placed (asphalt binder) @ 91c. | 3,124 03 | | |
| 14,945 square feet artificial stone sidewalks furnished and laid @ 12c. | 1,793 40 | | |
| 54 square feet artificial stone driveways furnished and laid @ 12c. | 6 48 | | |
| 9 covers reset @ \$3 | 27 00 | | |
| Extra work — Trim old flagging as directed: 20 hours, stonecutter, @ 62½c. | 12 50 | | |
| Plus 15 per cent on \$12.50 | 1 88 | | |
| | <u>\$5,853 80</u> | | |
| Less amount paid in 1915, 4,856 88 | | 996 92 | |
| | | | <u>\$1,017 53</u> |
| <i>St. Rose street, extended to South street. (Work not started.)</i> | | | |
| Engineering | \$30 30 | | |
| Engineering expense | 10 | | |
| Advertising | 2 78 | | |
| | | | <u>\$33 18</u> |
| <i>St. William street, from Dorchester avenue to Auckland street. (Work done in 1915.)</i> | | | |
| Sand and gravel | | | <u>\$33 95</u> |
| <i>Santuit street, from Roseland street to Welles avenue. (Work not started.)</i> | | | |
| Engineering | \$98 18 | | |
| Engineering expense | 80 | | |
| | | | <u>\$98 98</u> |
| <i>Saville street, from Park street to Stratford street. (Work not started.)</i> | | | |
| Advertising | | | <u>\$2 56</u> |
| <i>Schiller road, from Rockland street to Dedham line. (Work done in 1915.)</i> | | | |
| Engineering expense | | | <u>\$0 30</u> |
| <i>Seaver street (southwesterly side), from Walnut avenue to Humboldt avenue. Length, 1,400 linear feet. Area, 5,056 square yards earth and rock excavation done, wall removed, loam spaces constructed.</i> | | | |
| Engineering | \$59 88 | | |
| Amount paid William J. Barry, under contract: | | | |
| 4,202 cubic yards earth excavation @ 50c. | \$2,101 00 | | |
| 10,163 cubic yards rock excavation @ \$1.50 | 15,244 50 | | |
| | <u>\$17,345 50</u> | | |
| Carried forward | | \$59 88 | |

| | | |
|--|--------------------|--------------------------|
| <i>Brought forward</i> | \$17,345 50 | \$59 88 |
| 531 linear feet wall removed @ \$1 | 531 00 | |
| Extra work — Haul surplus material to ap- proach to Franklin Park and slope banks as directed: | | |
| 20½ days, foreman, @ \$5 | 101 25 | |
| 295 days' labor @ \$2.25 | 663 75 | |
| 21 days, timekeeper, @ \$4 | 84 00 | |
| Plus 15 per cent on \$849, | 127 35 | |
| Plus \$0.0662 insurance | 56 20 | |
| 51½ days, double team, @ \$6, | 310 50 | |
| 1 day, auto truck, @ \$20 | 20 00 | |
| | <u>\$19,239 55</u> | |
| Less amount paid in 1915 | 16,710 07 | |
| | | <u>2,529 48</u> |
| | | <u><u>\$2,589 36</u></u> |
| <i>Seaver street</i> (southeast side), Humboldt avenue to Blue Hill avenue. (Unfinished work from 1915.) | | |
| Engineering | \$88 55 | |
| Engineering expense | 80 | |
| Gravel | 3 00 | |
| Labor, excavating | 231 43 | |
| Labor, grading loam space | 119 37 | |
| Teaming | 76 00 | |
| | <u>\$519 15</u> | |
| Credit: Blocks, old granite | 10 00 | |
| | | <u><u>\$509 15</u></u> |
| <i>Selwyn street</i> , from Farquhar street 1,174 feet northeasterly. (Work not started.) | | |
| Engineering | \$23 72 | |
| Advertising | 4 59 | |
| | | <u><u>\$28 31</u></u> |
| <i>South street</i> , from Commonwealth avenue to Chestnut Hill avenue. (Work not started.) | | |
| Engineering | | <u><u>\$6 50</u></u> |
| <i>South Sydney street</i> , from Savin Hill avenue to Bay street. (Work done in 1915.) | | |
| Engineering expense | | <u><u>\$0 15</u></u> |
| <i>Southwick street</i> , from Neponset avenue to Freeport street. Length, 359 linear feet. Area, 1,040 square yards. A part of the filling has been furnished. (Work unfinished.) | | |
| Engineering | \$84 89 | |
| Engineering expense | 2 00 | |
| Advertising | 3 12 | |
| | | <u>\$90 01</u> |
| Carried forward | | |

PUBLIC WORKS DEPARTMENT.

267

| | | | |
|--|----------|---------|-----------------|
| <i>Brought forward</i> | | \$90 01 | |
| Amount paid Central Construction Company, under contract: | | | |
| 1,000 cubic yards filling furnished @ 50c. | \$500 00 | | |
| Less 15 per cent retained | 75 00 | | |
| | | 425 00 | |
| | | | <u>\$515 01</u> |

Spring street, at West Department of Boston City Hospital. Length, 1,528 linear feet. Iron and wooden fence constructed and artificial stone sidewalks laid.

| | | | |
|---|------------|----------|-------------------|
| Engineering | \$54 19 | | |
| Inspection | 320 00 | | |
| Engineering expense | 1 90 | | |
| Teaming | 22 05 | | |
| Amount paid McNeil Construction Company, under contract: | | | |
| Building fence | \$8,750 00 | | |
| Extra work — Remove bath house near Charles River Bridge and erect same on land of City Hospital as directed | 350 00 | | |
| Extra work — Extend supports of iron fence into concrete foundations as directed and change bracings to $\frac{1}{4}$ -inch stock | 25 00 | | |
| Extra work — Remove three trees and one stump | 35 00 | | |
| Extra work — Plumb back pier and fence due to settlement of subfoundation: | | | |
| 3 days, carpenter, @ \$5.20 | 15 60 | | |
| 1 $\frac{1}{2}$ days, carpenter's helper, @ \$2.80 | 4 20 | | |
| Plus 15 per cent on \$19.80 | 2 97 | | |
| 3 bags cement @ 50c. | 1 50 | | |
| $\frac{1}{2}$ day, double team, @ \$6 | 3 00 | | |
| | \$9,187 27 | | |
| Less amount paid in 1915 | 4,760 00 | | |
| | | 4,427 27 | |
| | | | <u>\$4,825 41</u> |

Stratton street, from Blue Hill avenue to Lucerne street. (Work done in 1915.)

| | |
|-----------------------|----------------|
| Engineering | <u>\$18 30</u> |
|-----------------------|----------------|

Sturtevant street, from Park street to Gibson street. Length, 567 linear feet. Area, 1,386 square yards. Hassam block pavement constructed. Straight edgestone set and artificial stone sidewalks constructed.

| | |
|----------------------------------|-----------------|
| Engineering | \$141 65 |
| Inspection | 238 00 |
| Engineering expense | 4 45 |
| Advertising | 6 54 |
| <i>Carried forward</i> | <u>\$390 64</u> |

| | | |
|---|----------|-------------------|
| <i>Brought forward</i> | | \$390 64 |
| Edgestone, 438 feet straight, 104 feet circular and 4 small corners | | 381 61 |
| Flagging, 50 feet granite | | 38 00 |
| Lumber | | 2 73 |
| Labor, handling stock | | 7 92 |
| Amount paid James Doherty, under contract: | | |
| Removing trees, bushes, etc. | \$0 01 | |
| 684 cubic yards earth excavation @ 37c. | 253 08 | |
| 977 linear feet straight edgestone and corners hauled and set @ 16c. | 156 32 | |
| 104 linear feet circular edgestone set @ 11c. | 11 44 | |
| 4 square yards existing granite block paving relaid @ 35c. | 1 40 | |
| 1,474 square yards Hassam block pavement furnished and laid, grout joints, including concrete base, @ \$2.97 | 4,377 78 | |
| 10 square yards flagging crosswalks hauled and laid, grout joints, including concrete base, @ \$1.45 | 14 50 | |
| 4,743 square feet artificial stone sidewalks furnished and laid @ 10½c. | 498 02 | |
| 18 covers reset @ \$3 | 54 00 | |
| | | 5,366 55 |
| Extra work — Remove the existing edgestone and construct new driveway at the northerly side of the Sturtevant factory: | | |
| 6 hours' paver, @ 62½c. | \$3 75 | |
| 20 hours' labor @ 30c. | 6 00 | |
| | | 9 75 |
| Plus 15 per cent on \$9.75 | | 1 46 |
| Extra work — Furnish and place crushed stone for approach to Park street: | | |
| 12 hours' labor @ 30c. | | 3 60 |
| Plus 15 per cent on \$3.60 | | 54 |
| 5.75 tons crushed stone @ \$1.50 | | 8 63 |
| Extra work — Build a blind drain on the southerly side of Sturtevant street from the catch-basin on the corner of Park street to the catch-basin about 150 feet easterly: | | |
| Building blind drain | | 58 00 |
| | | <u>\$6,269 43</u> |

Temple street, from Spring street to Ivory street. Edgestone set, artificial stone sidewalks constructed and roadway partly constructed with asphalt pavement. (Work unfinished.)

PUBLIC WORKS DEPARTMENT.

269

| | | |
|---|-------------------|--|
| Engineering | \$275 48 | |
| Inspection | 172 23 | |
| Engineering expense | 5 50 | |
| Edgestone, 1,842 feet straight and 140 feet circular | 1,506 99 | |
| Lumber | 1 56 | |
| Labor, making templets | 6 50 | |
| Labor, handling stock | 32 20 | |
| Labor, chemist | 5 11 | |
| Amount paid to Central Construction Company, under contract: | | |
| 1,500 cubic yards earth excavation @ 55c. | \$825 00 | |
| 2,000 linear feet straight edgestone and corners hauled and set @ 17c. | 340 00 | |
| 140 linear feet circular edgestone set @ 15c. | 21 00 | |
| 900 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid (unfinished) @ 68c. | 612 00 | |
| | <u>\$1,798 00</u> | |
| Less 15 per cent retained, | 269 70 | |
| | <u>1,528 30</u> | |
| | <u>\$3,533 87</u> | |
| Credit: Blocks, old granite | 4 87 | |
| | <u>\$3,529 00</u> | |

Theodore street, from Morton street 618 feet easterly. Length, 624 linear feet. Area, 1,803 square yards. Street rough graded and edgestone hauled.

| | | |
|---|-------------------|--|
| Engineering | \$41 60 | |
| Inspection | 63 87 | |
| Engineering expense | 1 15 | |
| Advertising | 3 12 | |
| Edgestone, 1,087 feet straight | 782 64 | |
| Labor, handling stock | 16 31 | |
| Amount paid Central Construction Company, under contract: | | |
| 150 cubic yards earth excavation @ 55c. | \$82 50 | |
| 50 cubic yards rock excavation @ \$5 | 250 00 | |
| | <u>\$332 50</u> | |
| Less 15 per cent retained, | 49 87 | |
| | <u>282 63</u> | |
| | <u>\$1,191 12</u> | |

Trent street, from Coleman street to Clarkson street. Length, 228 linear feet. Asphalt pavement laid on a 6-inch Portland cement concrete base. Artificial stone sidewalks were constructed. (Unfinished work from 1915.)

| | |
|---------------------------|----------------|
| Engineering | \$5 70 |
| Inspection | 21 00 |
| Carried forward | <u>\$26 70</u> |

| | |
|------------------------|---------|
| <i>Brought forward</i> | \$26 70 |
| Engineering expense | 75 |
| Advertising | 4 50 |
| Sand | 18 70 |

Amount paid William J.
Rafferty & Co., under
contract:

| | |
|---|--------|
| 4 square yards granite blocks paving relaid, grout joints, @ \$1.50 | \$6 00 |
| 498 square yards bituminous concrete binder and asphalt wearing surface furnished and laid @ \$1.50 | 747 00 |
| 1,970 square feet artificial stone sidewalks fur- nished and laid @ 17c., | 334 90 |

\$1,087 90
715 35

Amount paid in 1915

372 55

\$423 20

Tuckerman street, from *Dorchester street* to *Middle street*. Length, 375 linear feet. Area, 775 square yards. Edgestone set, artificial stone sidewalks constructed and roadway paved with asphalt on a 4-inch concrete base.

| | |
|---|---------|
| Engineering | \$87 91 |
| Inspection | 88 00 |
| Engineering expense | 3 50 |
| Advertising | 1 09 |
| Edgestone, 705 feet straight, 33 feet cir- cular and 2 small corners | 555 91 |
| Bricks | 4 38 |
| Lumber | 1 92 |
| Labor, making templets | 7 50 |
| Labor, handling stock | 10 68 |
| Labor, chemist | 7 60 |
| Teaming | 2 50 |

Amount paid Central Construction Company,
under contract:

| | |
|--|----------|
| 255 cubic yards earth excava- tion @ 55c. | \$140 25 |
| 12 cubic yards rock excava- tion @ \$5 | 60 00 |
| 666 linear feet straight edge- stone and corners hauled and set @ 18c. | 119 88 |
| 33 linear feet circular edge- stone set @ 11c. | 3 63 |
| 60 linear feet existing edge- stone reset @ 10c. | 6 00 |
| 20 square yards existing granite block paving re- laid, gravel joints, @ 40c. | 8 00 |

Carried forward . . . \$337 76 \$770 99

PUBLIC WORKS DEPARTMENT.

271

| | | |
|--|------------|-------------------|
| <i>Brought forward</i> | \$337 76 | \$770 99 |
| 768 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid @ \$1.60 | 1,228 80 | |
| 21 square yards existing brick sidewalks relaid @ 30c. | 6 30 | |
| 3,055 square feet artificial stone sidewalks furnished and laid @ 12½c. | 381 88 | |
| 5 covers reset @ \$3 | 15 00 | |
| | <hr/> | |
| | \$1,969 74 | |
| Less 15 per cent retained | 295 46 | |
| | <hr/> | |
| | | 1,674 28 |
| | | <hr/> |
| | | <u>\$2,445 27</u> |

Turner street, from Washington street to Faneuil street. (Work not started.)

| | | |
|-------------------------------|---------|----------------|
| Engineering | \$84 98 | |
| Engineering expense | 90 | <u>\$85 88</u> |

Upland avenue, from Park street to Melville avenue. Length, 748 linear feet. Area, 2,620 square yards. Edgestone was set and roadway rough graded by district forces. The contractor constructed the artificial stone sidewalks and paved the roadway with asphalt pavement on a concrete base. Unfinished work from 1915. Final payment not made.

| | |
|--|------------|
| Engineering | \$100 97 |
| Inspection | 141 90 |
| Engineering expense | 5 20 |
| Advertising | 3 12 |
| Edgestone, 6½ feet straight, 12 circular and 2 small corners. | 25 08 |
| Lumber | 7 51 |
| Gravel | 18 12 |
| Steam roller | 13 00 |
| Labor, making templates | 13 25 |
| Labor, watchman | 227 50 |
| Labor, chemist | 30 43 |
| Amount paid Central Construction Company, under contract: | |
| 500 cubic yards earth excavation @ 55c. | \$275 00 |
| 2,562 square yards concrete base bituminous concrete binder and asphalt wearing surface furnished and laid @ \$1.60, | 4,099 20 |
| 4,000 square feet artificial stone sidewalks furnished and laid (unfinished) @ 9c., | 360 00 |
| 6 covers reset @ \$3 | 18 00 |
| | <hr/> |
| <i>Carried forward</i> | \$4,752 20 |
| | <hr/> |
| | \$586 08 |

| | | |
|--|------------|-------------------|
| <i>Brought forward</i> | \$4,752 20 | \$586 08 |
| Less 15 per cent retained | 712 83 | |
| | <hr/> | 4,039 37 |
| Labor, edgestone setting | | 83 25 |
| Labor, edgestone excavating | | 28 75 |
| Labor, roadway excavating | | 492 75 |
| Teaming | | 500 45 |
| | | <hr/> |
| | | \$5,730 65 |
| Credit: Flagging, old, North River | | 22 50 |
| | | <hr/> |
| | | <u>\$5,708 15</u> |

Vista street, from Augustus avenue to Malvern road. Edgestone set and roadway rough graded. (Work unfinished.)

| | | |
|--|----------|-------------------|
| Engineering | | \$32 09 |
| Inspection | | 60 06 |
| Engineering expense | | 1 20 |
| Advertising | | 7 50 |
| Edgestone, 767 feet straight and 4 small corners | | 613 67 |
| Labor, handling stock | | 8 91 |
| Amount paid Martino DeMatteo, under contract: | | |
| 280 cubic yards earth excavation @ 75c. | \$210 00 | |
| 650 linear feet straight edgestone and corners hauled and set @ 25c. | 162 50 | |
| 120 linear feet circular edgestone set @ 12c. | 14 40 | |
| | <hr/> | |
| | \$386 90 | |
| Less 15 per cent retained | 58 04 | |
| | <hr/> | |
| | | 328 86 |
| | | <hr/> |
| | | <u>\$1,052 29</u> |

Wait street, from Hillside street to Sachem street. Length, 163 linear feet. Area, 403 square yards. Edgestone set, bituminous macadam roadway laid. Artificial stone steps, sidewalks and walls.

| | | |
|--|----------|----------|
| Engineering | | \$277 31 |
| Inspection | | 161 00 |
| Engineering expense | | 5 90 |
| Advertising | | 5 00 |
| Edgestone, 235 feet straight and 19 feet circular | | 157 69 |
| Flagging, 54 feet granite | | 43 27 |
| Blocks | | 74 50 |
| Labor, handling stock | | 4 34 |
| Amount paid to James Doherty, under contract: | | |
| Removing trees, etc. | \$1 00 | |
| 263 cubic yards earth excavation @ 75c. | 197 25 | |
| 8 cubic yards water box excavation @ \$1 | 8 00 | |
| 225 linear feet straight edgestone and corners hauled and set @ 23c. | 51 75 | |
| | <hr/> | |
| <i>Carried forward</i> | \$258 00 | \$729 01 |

| | | |
|---|----------|-------------------|
| <i>Brought forward</i> | \$258 00 | \$729 01 |
| 28 linear feet circular edge-stone set @ 15c. | 4 20 | |
| 73 linear feet existing edge-stone set @ 13c. | 9 49 | |
| 89 square yards granite block paving hauled and laid @ 65c. | 57 85 | |
| 21 square yards existing granite block paving relaid @ 40c. | 8 40 | |
| 12 square yards flagging crosswalks hauled and laid @ 70c. | 8 40 | |
| 281 square yards bituminous macadam surface furnished and placed (tar) @ 93c. | 261 33 | |
| 28 square yards existing brick sidewalks relaid @ 30c. | 8 40 | |
| 2,138 square feet artificial stone sidewalks furnished and laid @ 13c. | 277 94 | |
| 4 covers reset @ \$3 | 12 00 | |
| Building artificial stone walls, steps, platforms and walks | 1,675 00 | |
| Extra work — F u r n i s h and apply one and three quarters (1½) gallons tar binder per square yard in addition to amount specified in contract: | | |
| 492 gallons extra tar binder furnished and applied @ 08½c. | 40 59 | |
| | | 2,621 60 |
| | | <u>\$3,350 61</u> |
| <i>Waldo terrace</i> , from Washington street to Henshaw street. (Work not started.) | | |
| Engineering | \$30 85 | |
| Engineering expense | 80 | |
| | | <u>\$31 65</u> |
| <i>Walley street</i> , from Gladstone street to Waldemar avenue. (Work not started.) | | |
| Engineering | | <u>\$5 67</u> |
| <i>Washington street</i> , from Asticou road to Morton street. Edgestone reset, concrete base laid and granite block pavement constructed. (Work unfinished.) | | |
| Engineering | \$476 99 | |
| Inspection | 184 75 | |
| Engineering expense | 11 20 | |
| Edgestone, 14 feet straight, 42 feet circular and 1 corner | 61 38 | |
| | | <u>\$734 32</u> |
| <i>Carried forward</i> | | |

| | | | |
|--|------------|-------------------|--|
| <i>Brought forward</i> | | \$734 32 | |
| Advertising | | 10 00 | |
| Lumber | | 1 20 | |
| Labor, making templets | | 2 75 | |
| Labor, stonemason | | 17 25 | |
| Labor, spreading stone on walks | | 5 00 | |
| Teaming | | 2 50 | |
| Amount paid to James Doherty, under contract: | | | |
| 1,200 cubic yards earth excavation @ 66½c. | \$798 00 | | |
| 50 linear feet circular edge-stone set @ 13c. | 6 50 | | |
| 530 linear feet existing edge-stone reset @ 14½c. | 78 18 | | |
| 270 cubic yards concrete base furnished and laid @ \$5.25 | 1,417 50 | | |
| 840 square yards granite block paving furnished and laid, grout joints, @ \$2.49 | 2,091 60 | | |
| 930 square yards existing granite block paving relaid, grout joints, @, 95c. | 883 50 | | |
| 60 square yards existing crosswalks relaid, grout joints, @ 90c. | 54 00 | | |
| Concrete wall built | 1,090 00 | | |
| | \$6,419 28 | | |
| Less 15 per cent retained, | 962 89 | | |
| | | 5,456 39 | |
| | | <u>\$6,229 41</u> | |
| Credit: Edgestone, 304 feet old straight, 63 feet circular and 2 small corners | \$167 90 | | |
| Blocks, 5,607 old granite | 112 14 | | |
| Flagging | 12 40 | | |
| | | 292 44 | |
| | | <u>\$5,936 97</u> | |
| <i>Wellington Hill footway, from Wellington Hill street to Walk Hill street.</i> | | | |
| (Work done in 1915.) | | | |
| Engineering | | \$14 27 | |
| Engineering expense | | 75 | |
| | | <u>\$15 02</u> | |
| <i>Wensley street, from Bucknam street to Bickford avenue.</i> | | | |
| Engineering | | \$124 58 | |
| Engineering expense | | 70 | |
| Advertising | | 4 00 | |
| | | <u>\$129 28</u> | |
| <i>Westmoreland street, from Adams street 708 feet westerly. (Work done in 1915.)</i> | | | |
| Engineering expense | | <u>\$0 35</u> | |

Westwood street, from Richfield street to Wales street. Edgestone set, roadway rough graded. (Work unfinished.)

| | |
|--|----------|
| Engineering | \$135 71 |
| Inspection | 84 50 |
| Engineering expense | 3 35 |
| Advertising | 4 61 |
| Edgestone, 910 feet straight | 655 20 |
| Labor, handling stock | 13 65 |
| Steam roller | 26 00 |
| Labor, roadway excavating | 43 66 |
| Teaming | 21 80 |

Amount paid Central Construction Company,
under contract:

| | |
|--|----------|
| 900 cubic yards earth excavation @ 74c. | \$666 00 |
| 115 cubic yards rock excavation @ \$6 | 690 00 |
| 700 linear feet straight edgestone and corners hauled and set @ 23c. | 161 00 |

\$1,517 00

Less 5 per cent retained 75 85

1,441 15

\$2,429 63

Whitfield street, from Talbot avenue to Norfolk street. (Work done in 1915.)

| | |
|-----------------------|---------------|
| Engineering | <u>\$6 50</u> |
|-----------------------|---------------|

William Jackson avenue, from Chestnut Hill avenue to Academy Hill road. (Work not started.)

| | |
|-------------------------------|--------|
| Engineering | \$6 86 |
| Engineering expense | 50 |
| Advertising | 2 57 |
| Teaming | 8 75 |

\$18 68

Willow court, extended to Massachusetts avenue.

| | |
|-------------------------------|----------|
| Engineering | \$124 26 |
| Engineering expense | 2 20 |
| Advertising | 2 04 |

\$128 50

Wilmington avenue, from Milton avenue to Nevada street. (Work not started.)

| | |
|-----------------------|---------------|
| Engineering | <u>\$9 00</u> |
|-----------------------|---------------|

Woodworth street, from Walnut street to Redfield street. (Work done in 1914-15.)

| | |
|-------------------------------|--------|
| Engineering | \$5 52 |
| Engineering expense | 10 |
| Advertising | 2 57 |

\$8 19

Wordsworth Street Footbridge, East Boston. Steel tress footbridge constructed over Boston, Revere Beach & Lynn Railroad.

| | | |
|---|------------|-------------------|
| Engineering | \$452 37 | |
| Inspection | 240 00 | |
| Advertising | 13 50 | |
| Printing | 55 21 | |
| Amount paid to Daniel Marr & Son Company, under contract: | | |
| Contract price | \$2,210 00 | |
| Extra work under order dated August 11, 1916: | | |
| 2½ cubic yards concrete @ \$10 | 27 50 | |
| 524 feet B. M. lumber used in forms @ \$30 | 15 72 | |
| 3 cubic yards excavation @ \$2, | 6 00 | |
| Add 15 per cent | 7 38 | |
| | <hr/> | 2,266 60 |
| | | <u>\$3,027 68</u> |

Wordsworth street, from Horace street to Coleridge street. (Work not started.)

| | |
|-----------------------|---------------|
| Engineering | <u>\$4 47</u> |
|-----------------------|---------------|

Worthington street, from Longwood avenue to Fenway. Length, 1,161 linear feet. Area, 3,385 square yards. Roadway paved with asphalt on a six (6) inch Portland cement concrete base and artificial stone sidewalks constructed by contract; edgestone set and concrete base laid by division force.

| | | |
|---|------------------|------------------|
| Engineering | \$44 77 | |
| Inspection | 150 50 | |
| Engineering expense | 4 70 | |
| Advertising | 4 50 | |
| Edgestone, 1,188 feet 8 inches straight | 796 57 | |
| Flagging 113 feet, granite | 85 75 | |
| Blocks | 13 20 | |
| Cement, 289 barrels | 377 58 | |
| Sand, 149 cubic yards | 177 31 | |
| Crushed stone, 252 tons | 338 23 | |
| Teaming | 210 82 | |
| Amount paid to Central Construction Company, under contract: | | |
| 2,435 square yards bituminous concrete binder and asphalt wearing surface furnished and laid @ \$1.57 | \$3,822 95 | |
| 14 square yards existing brick sidewalks relaid @ 50c., | 7 00 | |
| 7,045 square feet artificial stone sidewalks furnished and laid @ 13c. | 915 85 | |
| 140 square feet artificial stone driveways furnished and laid @ 16c. | 22 40 | |
| 335 square yards loam spaces graded and seeded @ 9c. | 30 15 | |
| Carried forward | <hr/> \$4,798 35 | <hr/> \$2,203 93 |

PUBLIC WORKS DEPARTMENT.

277

| | | |
|--|-------------------|--------------------------|
| <i>Brought forward</i> | \$4,798 35 | \$2,203 93 |
| 147.7 cubic yards loam furnished @ \$1.25 | 184 63 | |
| Extra work — Remove accumulation of snow and ice from the concrete base: | | |
| 8 hours, foreman, @ 62½c. | 5 00 | |
| 24 hours, timekeeper, @ 31½c. | 7 50 | |
| 295 hours' labor @ 25c. | 73 75 | |
| Plus 15 per cent on \$86.25, | 12 94 | |
| 14 sacks salt @ 90c. | 12 60 | |
| 200 gallons kerosene oil @ 9c., | 18 00 | |
| | <u>\$5,112 77</u> | |
| Less amount paid in 1915, | <u>3,244 17</u> | |
| | | <u>1,868 60</u> |
| | | <u>\$4,072 53</u> |
| Credit: Bricks, 10,000 old sidewalk | | <u>70 00</u> |
| | | <u><u>\$4,002 53</u></u> |
| <i>Wyoming street</i> , extended to Humboldt avenue. (Work not started.) | | |
| Engineering | \$6 00 | |
| Advertising | 75 | |
| | <u> </u> | <u><u>\$6 75</u></u> |

RECAPITULATION OF STREET WORK.

MAINTENANCE.

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|---|--------------------|
| <i>Allston street</i> , from Bulfinch street to Bowdoin street | \$700 38 |
| <i>Appian way</i> , from Franklin street to Raymond street | 174 85 |
| <i>Ashland street</i> , at railroad bridge | 305 89 |
| <i>Aspen street</i> , from Montrose street to Copeland street | 998 28 |
| <i>Baxter street</i> , from C street to D street | 1,117 25 |
| <i>Bay State road</i> , from Granby street to Ashby street | 973 56 |
| <i>Beacon street</i> , from Newton line to Cleveland circle | 17,621 47 |
| <i>Bennington street</i> , from Saratoga street to Leyden street | 2,628 36 |
| <i>Benton street</i> , from Columbus avenue to Tremont street | 753 69 |
| <i>Bickerstaff street</i> , from Haviland street to Astor street | 1,272 09 |
| <i>Blandford street</i> , from Commonwealth avenue to the railroad | 716 85 |
| <i>Blue Hill avenue</i> , at Talbot avenue intersection and approaches | 947 18 |
| <i>Blue Hill avenue</i> , from Hiawatha road to Wellington Hill street | 6 29 |
| <i>Blue Hill avenue</i> , from Woodrow avenue to Talbot avenue | 1,633 53 |
| <i>Boylston street</i> , from Ipswich street to Brookline avenue | 3,300 73 |
| <i>Buckingham street</i> , from Dartmouth street to Columbus avenue | 212 73 |
| <i>Burke street</i> , from Tremont street to Columbus avenue | 315 62 |
| <i>Carpenter street</i> , from Hyde street to Preble street, | 1,055 85 |
| <i>Centre street</i> , from Dorchester avenue to Adams street | 3,641 44 |
| <i>Centre street</i> , from Bellevue street to Beech street (east side) | 680 10 |
| <i>Centre street</i> , from Bellevue street to Spring street, | 1,604 84 |
| <i>Charles street</i> , from Dorchester avenue to Ditson street | 7,271 72 |
| <i>Carried forward</i> | <u>\$47,932 70</u> |



[REDACTED]

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[REDACTED]

[REDACTED]

PUBLIC WORKS DEPARTMENT.

279

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| <i>Brought forward</i> | \$47,932 70 |
| <i>Chelsea street</i> , from Porter street to Marion street, | 1,076 14 |
| <i>Chilmark street</i> , from Commonwealth avenue to Bay State road | 440 63 |
| <i>Colton street</i> , from West First street to West Second street | 289 69 |
| <i>Columbia road</i> , from Old Colony avenue to Newman street | 6,217 51 |
| <i>Concord street</i> , from Bunker Hill street to Monument square | 537 91 |
| <i>Cummington street</i> , from Blandford street to Lawton street | 1,771 50 |
| <i>Davenport street</i> , from Tremont street to Columbus avenue | 317 61 |
| <i>Deerfield street</i> , from Bay State road to Commonwealth avenue | 718 39 |
| <i>Dixfield street</i> , from Old Harbor street to Covington street | 543 11 |
| <i>Draper street</i> , from Bowdoin street to Arcadia street | 4,651 71 |
| <i>East Concord street</i> , from Washington street to Harrison avenue | 2 65 |
| <i>East Eighth street</i> , from Dorchester street to Covington street | 50 15 |
| <i>East Second street</i> , from Dorchester avenue to H street | 2,541 75 |
| <i>Essex street</i> , from Washington street to Harrison avenue (north side) | 221 25 |
| <i>Faulkner street</i> , from Dorchester avenue to Freeman street | 188 40 |
| <i>Geneva avenue</i> , from Blue Hill avenue to Walden street | 426 71 |
| <i>Harvard street</i> , from Talbot avenue to Vesta road, | 1,112 32 |
| <i>Harvard street</i> , from Vesta road to Abbot street | 1,619 29 |
| <i>Harvard street</i> , from Waterlow street to School street | 368 57 |
| <i>Haviland street</i> , from Massachusetts avenue to Hemenway street | 1,068 07 |
| <i>Howard avenue</i> , from Quincy street to Cunningham street | 7 50 |
| <i>I street</i> , from East Fourth street to East Sixth street | 1,222 13 |
| <i>I street</i> , from East Sixth street to Columbia road, | 1,700 73 |
| <i>Julian street</i> , from Blue Hill avenue to Judson street | 840 05 |
| <i>L street</i> , from East First street across East Broadway | 2 83 |
| <i>Lake street</i> , from Commonwealth avenue 1,720 feet northerly | 2,554 06 |
| <i>Carried forward</i> | \$78,423 36 |

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| <i>Brought forward</i> | \$78,423 36 |
| <i>Lake street</i> , from Commonwealth avenue 200 feet northerly (east side) | 1,439 44 |
| <i>Lanark road</i> , from Colliston road to Brookline avenue | 741 81 |
| <i>Lincoln street</i> , from Cambridge street to Franklin street | 882 20 |
| <i>Metropolitan avenue</i> , from Hyde Park avenue to River street | 9,671 29 |
| <i>Milton street</i> , from Sprague street to Dedham line, | 7,281 13 |
| <i>Morton street</i> , from Blue Hill avenue to Canterbury street | 3,094 47 |
| <i>Morton street</i> , from Forest Hills Cemetery to Canterbury street | 4,456 46 |
| <i>Nashua street</i> , in front of post office | 367 87 |
| <i>Newbury street</i> , from Brookline avenue to Charlesgate West | 526 53 |
| <i>Newport street</i> , from Crescent avenue to Harbor View street | 1,349 10 |
| <i>North street</i> , from Union street to Merchants row, | 956 81 |
| <i>North Centre street</i> , from Hanover street to North street | 2,584 41 |
| <i>North Margin street</i> , from La Fayette avenue 125 feet southerly | 348 49 |
| <i>Olney street</i> , from Blakeville street to Bowdoin street | 371 23 |
| <i>P street</i> , from East Sixth street to Columbia road, | 1,484 76 |
| <i>Palmer street</i> , from Harrison avenue to Washington street | 1,483 13 |
| <i>Park street</i> , from Adams street to railroad bridge, | 432 60 |
| <i>Pierce square</i> , from Adams street to Milton line, | 1,093 36 |
| <i>Pleasant street</i> , from Savin Hill avenue to Downer square | 5,675 62 |
| <i>Quincy street</i> , from Blue Hill avenue to Howard avenue | 109 13 |
| <i>Robinwood avenue</i> , from Rockview street to 100 feet westerly (south side) | 116 04 |
| <i>Roseclair street</i> , from Dorchester avenue to Boston street | 3,373 14 |
| <i>Rutherford avenue</i> , from Washington street to City square | 2,418 34 |
| <i>Saratoga street</i> , from Butler avenue to Washburn street | 7,537 14 |
| <i>Savin street</i> , from Blue Hill avenue to Warren street | 3,504 53 |
| <i>Somerset street</i> , from 20 feet north to 20 feet south of Ashburton place | 304 74 |
| <i>South street</i> , from Commonwealth avenue to Chestnut Hill avenue | 1,033 87 |
| <i>Carried forward</i> | \$141,061 00 |

PUBLIC WORKS DEPARTMENT.

281

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| <i>Brought forward</i> | \$141,061 00 |
| <i>Sudbury street</i> , from Portland street to Haymarket square | 679 54 |
| <i>Summer street</i> , at viaduct and from D street to E street | 1,268 40 |
| <i>Tenean street</i> , from Freeport street 1,500 feet southerly | 354 87 |
| <i>Union Park street</i> , from Shawmut avenue to Tremont street | 1,683 27 |
| <i>Union Park street</i> , from Shawmut avenue to Washington street | 916 15 |
| <i>Wachusett street</i> , from Weld Hill street to Barlow street | 371 10 |
| <i>Walk Hill street</i> , from Blue Hill avenue to Almont street | 3,738 57 |
| <i>Walk Hill street</i> , from Hyde Park avenue to Canterbury street | 5,092 02 |
| <i>Walnut avenue</i> , from Dale street to Humboldt avenue (north side) | 457 35 |
| <i>Warren street</i> , from Blue Hill avenue to Brunswick street | 1,086 77 |
| <i>Washington street</i> , from Ashland street to La Grange street | 4,795 73 |
| <i>Washington street</i> , from New York, New Haven & Hartford Railroad to Stony brook | 230 35 |
| <i>Washington street</i> , from Bartlett street to Dudley street | 849 35 |
| <i>Washington street</i> , from Erie street to Eldon street, | 183 26 |
| <i>Waumbeck street</i> , from Warren street to Humboldt avenue | 549 48 |
| <i>Wellesley park</i> , from Park street to Melville avenue | 259 80 |
| | <hr/> |
| | \$163,577 01 |
| Amount due from Highways, Making of | 1,318 60 |
| | <hr/> |
| | <u>\$164,895 61</u> |

CHARGED TO SPECIAL APPROPRIATIONS.

| | |
|---|-------------------|
| <i>Belgrade avenue extension and Beech street</i> , widening | \$59 40 |
| <i>Chelsea street</i> , Charlestown, widening | 30 30 |
| <i>Hyde Park avenue</i> , widening | 490 98 |
| <i>Norfolk street</i> , Dorchester, widening | 570 78 |
| * <i>Charles street</i> (now Caledonian avenue), between Spring and Hamilton streets. | |
| | <hr/> |
| | <u>\$1,151 46</u> |

* Charged to Highways, Making of, \$449.92.

CHARGED TO APPROPRIATION FOR GRANOLITHIC SIDEWALKS.

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| <i>Amherst street</i> , from Penfield street to Belgrade avenue | \$0 45 |
| <i>Ashmont street</i> , from Neponset avenue 200 feet westerly | 361 48 |
| <i>Bayswater street</i> , from Saratoga street to Austin avenue | 72 24 |
| <i>Belfort street</i> , from Dorchester avenue to Saxton street | 50 |
| <i>Belvidere street</i> , from Massachusetts avenue to Dalton street | 35 44 |
| <i>Birch street</i> , from Penfield street to Corinth street, | 75 |
| <i>Blue Hill avenue</i> , east side, from Washington street to Morton street, and west side, from Cheney street to Seaver street | 367 07 |
| <i>Bourne street</i> , north side, from Walk Hill street to Patten street | 10 |
| <i>Bowdoin street</i> , west side, from Bowdoin avenue to Bullard street | 15 |
| <i>Brooks street</i> , from Faneuil street to Hobart street, | 1 20 |
| <i>Brookside avenue</i> , from Boylston street to Green street | 30 |
| <i>Corbet street</i> , from Norfolk street to Morton street, | 90 15 |
| <i>Creighton street</i> , from Centre street to Day street, | 20 |
| <i>Day street</i> , from Centre street to Minden street | 60 |
| <i>Dorchester avenue</i> , east side, near Richmond street, | 328 58 |
| <i>Dorchester avenue</i> , at Nos. 1542, 1544, 1582, 1584, 1586 and 1588 | 1 02 |
| <i>Dorchester avenue</i> , from Ralston street 110 feet southerly | 425 00 |
| <i>Dover street</i> , north side, from Tremont street 58 feet easterly | 214 72 |
| <i>Dracut street</i> , from Dorchester avenue to Bruce street | 05 |
| <i>East Concord street</i> , north side, from Harrison avenue to 245 feet easterly. | 337 00 |
| <i>Elmo street</i> , from Erie street to Greenwood street, | 1 10 |
| <i>Evergreen street</i> , from South Huntington avenue to Day street | 75 |
| <i>Falmouth street</i> , east side, at Christian Science Church Park | 541 20 |
| <i>Florence street</i> , from Poplar street to Ashland street | 17 93 |
| <i>Gladstone street</i> , from Walley street to Upland street | 1,555 89 |
| <i>Harrison avenue</i> , west side, from Kneeland street to Harvard street | 986 08 |
| <i>Carried forward</i> | <hr/> \$5,339 95 |

PUBLIC WORKS DEPARTMENT.

283

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| <i>Brought forward</i> | \$5,339 95 |
| <i>Harrison avenue</i> , east side, from Stoughton street to East Concord street | 268 31 |
| <i>Hastings street</i> , from Centre street to Montview street | 45 |
| <i>Haviland street</i> , from Haviland terrace to 273 feet northerly | 6 19 |
| <i>Holbrook street</i> , from Centre street to Dane street, | 90 |
| <i>Holton street</i> , from Everett street to Franklin street, | 50 |
| <i>Huntington avenue</i> , at Christian Science Church Park | 414 30 |
| <i>Magnolia square</i> , from Magnolia street 110 feet westerly | 114 96 |
| <i>Massachusetts avenue</i> , east side, from Norway street to 67 feet northerly | 210 94 |
| <i>Medfield street</i> , from Audubon road to St. Mary's street | 6 42 |
| <i>Norfolk avenue</i> , from Shirley street to Burrell street | 30 48 |
| <i>Norway street</i> , north side, from Massachusetts avenue 113 feet easterly, and south side, at Christian Science Church Park | 291 55 |
| <i>Penfield street</i> , from Belgrade avenue to Birch street | 242 39 |
| <i>Poplar street</i> , from Sycamore street to 240 feet south of Hilburn street | 1,586 15 |
| <i>Poplar street</i> , from Washington street to Sycamore street | 1,814 57 |
| <i>Quincy street</i> , from Coleman street to Barry street, | 10 |
| <i>Saratoga street</i> , from Butler avenue to Washburn avenue | 4,001 03 |
| <i>Scotia street</i> , from St. Cecilia street to Dalton street | 38 39 |
| <i>Shirley street</i> , south side, from Clifton street to Norfolk avenue | 49 54 |
| <i>St. Cecilia street</i> , from Boylston street to Belvidere street | 33 08 |
| <i>Stoughton street</i> , south side, from Harrison avenue 266 feet easterly | 390 17 |
| <i>Stoughton street</i> , south side, from Stoughton place to No. 15 | 93 |
| <i>Tremont street</i> , east side, from Dover street 89 feet northerly | 266 95 |
| <i>Walk Hill street</i> , west side, from Wachusett street to Bourne street | 20 |
| <i>Washington street</i> , south side, from Tip Top street to Newton line | 1,441 50 |
| <i>Water street</i> , from Kilby street 202 feet easterly | 14 99 |
| <i>Carried forward</i> | \$16,564 94 |

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| <i>Brought forward</i> | \$16,564 94 |
| <i>West Broadway</i> , from <i>Dorchester avenue</i> to <i>Dorchester street</i> | 9 50 |
| | <hr/> |
| | <u>\$16,574 44</u> |

CHARGED TO APPROPRIATION FOR RECONSTRUCTING AND
REPAIRING STREETS BY CONTRACT.

| | |
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| <i>Albany street</i> , from <i>Dover street</i> to <i>Northampton street</i> | \$51,989 91 |
| <i>Albany street</i> , from <i>Kneeland street</i> to <i>Boston & Albany Railroad bridge</i> | 75 88 |
| <i>Appleton street</i> , from <i>Berkeley street</i> to <i>Columbus avenue</i> | 9,014 16 |
| <i>Artificial stone sidewalks</i> | 14,507 46 |
| <i>Asphalt and bitulithic pavements repaired</i> | 35,964 66 |
| <i>Batterymarch street</i> , from <i>Franklin street</i> to <i>Broad street</i> | 4,127 07 |
| <i>Beach street</i> , from <i>Harrison avenue</i> to <i>Atlantic avenue</i> | 17 25 |
| <i>Blossom street</i> , from <i>Allen street</i> to <i>Fruit street</i> | 53 10 |
| <i>Boylston street</i> , from <i>Tremont street</i> to <i>Washington street</i> | 68 25 |
| <i>Canal street</i> , from <i>Haymarket square</i> to <i>Causeway street</i> | 698 38 |
| <i>Chandler street</i> , from <i>Berkeley street</i> to <i>Columbus avenue</i> | 7,346 28 |
| <i>Clinton street</i> , from <i>Merchants row</i> to <i>Commercial street</i> | 90 89 |
| <i>Columbia road</i> , from <i>Edward Everett square</i> to <i>Dudley street</i> | 19,198 81 |
| <i>Cross street</i> , from <i>Commercial street</i> to <i>Haymarket square</i> | 158 32 |
| <i>Dearborn street</i> , from <i>Albany street</i> to <i>Dudley street</i> | 3,082 96 |
| <i>Devonshire street</i> , from <i>Adams square</i> to <i>Water street</i> | 8,271 88 |
| <i>Dorchester avenue</i> , from <i>Savin Hill avenue</i> to <i>Freeport street</i> | 651 16 |
| <i>Fruit street</i> , from <i>Charles street</i> to <i>Blossom street</i> , | 98 76 |
| <i>Fulton street</i> , from <i>Blackstone street</i> to <i>Richmond street</i> | 64 30 |
| <i>Harrison avenue</i> , from <i>Kneeland street</i> to <i>Dover street</i> | 433 67 |
| <i>Haymarket square</i> , junction <i>Cross</i> , <i>Washington</i> and other streets | 176 97 |
| <i>Lincoln street</i> , from <i>Essex street</i> to <i>Beach street</i> | 73 96 |
| <i>McKinley square</i> , at <i>Broad street</i> | 167 83 |
| | <hr/> |
| <i>Carried forward</i> | \$156,331 91 |

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| <i>Brought forward</i> | \$156,331 91 |
| <i>Mercantile street</i> , from South Market street to Richmond street | 95 34 |
| <i>North Anderson street</i> , from Parkman street to Fruit street | 558 14 |
| <i>North Grove street</i> , from Cambridge street to Fruit street | 90 97 |
| <i>Parkman street</i> , from North Anderson street to North Grove street | 1,193 51 |
| <i>School street</i> , from Washington street to Tremont street | 5,524 22 |
| <i>Wachusett street</i> , from Weld Hill street to Barlow street | 756 10 |
| <i>Washington street</i> , from Haymarket square to Elm street | 139 72 |
| <i>Water street</i> , from Kilby street 202 feet easterly | 384 05 |
| <i>West Broadway</i> , from Dorchester avenue to E street | 134 16 |
| <i>West Canton street</i> , from Tremont street to Appleton street | 5,432 28 |
| | <hr/> |
| | \$170,640 40 |
| Amount included in streets on Highways, Making of | 10 01 |
| | <hr/> |
| | <u>\$170,650 41</u> |

CHARGED TO APPROPRIATION FOR HIGHWAYS, MAKING OF.

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| <i>Ainsworth street footway</i> , from Tyndale street to Belgrade avenue | \$6,798 10 |
| <i>Alexander street</i> , from Bird street about 527 feet northerly | 7,574 41 |
| <i>Amory street</i> , from Bragdon street to Centre street | 3,229 03 |
| <i>Ardent street</i> , from Belgrade avenue to Colberg avenue | 1,985 25 |
| <i>Atkins street</i> , from Washington street 609 feet northeasterly | 215 63 |
| <i>Augustus avenue</i> , from Poplar street to beyond Clarendon avenue | 947 58 |
| <i>Augustus avenue</i> , from Metropolitan avenue to Ethel street | 1,314 19 |
| <i>Bardwell street</i> , from South street to Ballard street | 2,956 76 |
| <i>Bezley road</i> , from Washington street to Florence street | 100 45 |
| <i>Birch street</i> , from Penfield street to Dudley avenue | 30 |
| | <hr/> |
| <i>Carried forward</i> | \$25,131 70 |

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|--|-------------|
| <i>Brought forward</i> | \$25,131 70 |
| <i>Blake street</i> , from Randolph street northeasterly | 73 73 |
| <i>Bourneside street</i> , from Park street to Melville avenue | 30 |
| <i>Bradwood street</i> , from Colberg avenue to Belgrade avenue | 685 19 |
| <i>Breck avenue</i> , Washington street to Nonantum street | 10 04 |
| <i>Brunswick street</i> , from Blue Hill avenue to Normandy street | 5,667 45 |
| <i>Caledonian avenue</i> (see Charles street — Special Appropriations) | 449 92 |
| <i>Caspian way</i> , from Savin Hill avenue easterly | 138 22 |
| <i>Cedric street</i> , from Magazine street to Langdon street | 4,441 32 |
| <i>Centervale park</i> , from Upland avenue to Bourneside street | 4,868 41 |
| <i>Chapin avenue</i> , from Mt. Vernon street to Preston road | 210 09 |
| <i>Chauncy street</i> , from Bedford street 106 feet northwesterly | 844 04 |
| <i>Claybourne street</i> , from 210 feet south of Dakota street to Park street | 445 20 |
| <i>Cliffmont street</i> , southwesterly from Canterbury street | 67 59 |
| <i>Condor street</i> , from Glendon street to East Eagle street | 20,365 56 |
| <i>Conley street</i> , from Old Colony Parkway to Tenean street | 15 03 |
| <i>Cornell street</i> , from Orange street to Colberg avenue | 1,552 84 |
| <i>Crandall street</i> , from Augustus avenue to Hillside avenue | 400 48 |
| <i>Crown path</i> , from Claybourne street to Washington street | 3,204 48 |
| <i>Cummings road</i> , from Commonwealth avenue extended | 116 52 |
| <i>Dana avenue footway</i> , from Dana avenue to Easton avenue | 91 78 |
| <i>Dane street</i> , from Holbrook street to Orchard street | 40 |
| <i>Dempster street</i> , from Ruggles street to Halleck street | 30 |
| <i>Downer avenue</i> , extended to Sawyer avenue | 54 83 |
| <i>Dunlap street</i> , from Washington street to Whitefield street | 1,143 00 |
| <i>Dunster road</i> , from Centre street to Pond street | 5,612 06 |
| <i>East First street</i> , from H street to West First street | 3,809 36 |
| <i>Carried forward</i> | \$79,399 84 |

PUBLIC WORKS DEPARTMENT.

287

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|---|--------------------|
| <i>Brought forward</i> | \$79,399 84 |
| <i>Elgin street, from Centre street to West Roxbury Branch Railroad</i> | 106 40 |
| <i>Epping street, from Washington street to Norfolk street</i> | 440 74 |
| <i>Eric avenue, from Savin Hill avenue northerly</i> | 2,837 78 |
| <i>Everton street, from Geneva avenue to Olney street</i> | 6,074 41 |
| <i>Faywood avenue, from Orient avenue to Town street</i> | 6 50 |
| <i>Fernboro street, from Lawrence avenue to Intervale street</i> | 5,366 02 |
| <i>Fordham road, from Commonwealth avenue to Brighton avenue</i> | 32 38 |
| <i>Gaffney street, from Commonwealth avenue to Boston & Albany Railroad</i> | 2,009 74 |
| <i>Glencoe street, from North Beacon street to Gardner street</i> | 105 59 |
| <i>Glendower road, from Kittredge street to Poplar street</i> | 10,606 00 |
| <i>Gove street, from Cottage street to Venice street</i> | 21 60 |
| <i>Gove street footway, from Orleans street to Bremen street</i> | 9,935 04 |
| <i>Grace street, from Roslin street to Walton street</i> | 2 65 |
| <i>Granada avenue, from Metropolitan avenue to Ethel street</i> | 1,116 48 |
| <i>Halifax street, from South Huntington avenue to Pond View street</i> | 14 84 |
| <i>Hallet street, from Minot street to the railroad</i> | 2,100 00 |
| <i>Harvard street, from Morton street to Deering road</i> | 495 49 |
| <i>Harwood street, from Willowwood street to Lucerne street</i> | 6,004 58 |
| <i>Haslet street, from Amherst street to Metcalf street,</i> | 30 |
| <i>Helen street, from Talbot avenue to Bernard street,</i> | 120 17 |
| <i>Herbert street, from Park street to West Tremlett street</i> | 15 |
| <i>Hillcrest street, from Elgin street to Temple street,</i> | 2,839 52 |
| <i>Hill Top street, from Granite avenue to Hallet street</i> | 2,780 12 |
| <i>Homestead street, from Humboldt avenue to Elm Hill avenue</i> | 3,130 09 |
| <i>Hubert street, from Shawmut avenue to Westminster street</i> | 2,946 88 |
| <i>Intervale street, from Columbia road to Normandy street</i> | 15 |
| <i>Jones avenue, from Mascot street to Ballou avenue,</i> | 9,613 57 |
| <i>Jones avenue footway, from Norfolk street to Ballou avenue</i> | 227 68 |
| <i>Carried forward</i> | <hr/> \$148,334 71 |

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|---|--------------|
| <i>Brought forward</i> | \$148,334 71 |
| <i>Juliette street</i> , from Fox street to Homes avenue | 45 |
| <i>Kenney street</i> , from Day street to 500 feet north- westerly | 4 00 |
| <i>Kenton road</i> , from Washington street easterly | 63 90 |
| <i>Kittredge street</i> , from Cornell street to Beech street, | 5,914 43 |
| <i>Langley road</i> , from Breck avenue to 571 feet easterly | 30 58 |
| <i>Lithgow street</i> , from Talbot avenue to Wainwright street | 1,602 75 |
| <i>Lorenzo street</i> , from Walnut street to Woodworth street | 10 |
| <i>Lorette street</i> , from Centre street to Hillcrest street, | 3,953 60 |
| <i>Lorne street</i> , from Harvard street northwesterly | 107 25 |
| <i>Lucas street</i> , from Washington street to Shawmut avenue | 184 31 |
| <i>Lyford street</i> , from Woodrow avenue to Franklin Field | 80 96 |
| <i>Matchett street</i> , from Washington street 843 feet northeasterly | 1,643 12 |
| <i>Melvinside terrace</i> , from Dorchester avenue to Minton street | 10 |
| <i>Mendon park</i> , from Bourneside street to Upland avenue | 9 00 |
| <i>Minton street</i> , from Amory street to Brookside avenue | 39 65 |
| <i>Montebello road</i> , from Forest Hills street to Walnut avenue | 8,903 27 |
| <i>Moraine street</i> , from South Huntington avenue to Jamaicaway | 231 76 |
| <i>Moreland street</i> , from Dennis street to Brook avenue | 8 95 |
| <i>Morton street</i> , from Norfolk street to Midland Division Railroad | 6,767 44 |
| <i>Mt. Ida road</i> , from Marie street to Ronan Park | 1,618 11 |
| <i>Neptune road</i> , from Bennington street to Boston, Revere Beach & Lynn Railroad | 324 82 |
| <i>Nevada street</i> , from Wilmington avenue to Fair- mount street | 4 50 |
| <i>Normandy street</i> , from Intervale street to Devon street | 3,678 33 |
| <i>North Beacon street</i> , from Cambridge street to Market street | 225 11 |
| <i>Oakland street</i> , from River street to Rockdale street, | 45 |
| <i>Orchardfield street</i> , from Dorchester avenue to Freeport street | 3,622 71 |
| <i>Orleans street</i> , from Gove street to Porter street | 7,600 46 |
| <i>Overland street</i> , from Brookline street to Boston & Albany Railroad | 113 85 |
| <i>Carried forward</i> | \$195,058 67 |

| | |
|---|--------------|
| <i>Brought forward</i> | \$195,058 67 |
| <i>Parkton road</i> , from Perkins street to Perkins street, | 9,636 78 |
| <i>Patten street</i> , from Hyde Park avenue to Bourne street | 40 39 |
| <i>Peacevale road</i> , from Norfolk street to Dunbar avenue | 4 10 |
| <i>Percival street</i> , from Fox street to Marie street | 15 |
| <i>Perham street</i> , from Vernon street to the railroad | 88 03 |
| <i>Porter street</i> , from Cottage street across Geneva street | 9 42 |
| <i>Prince street</i> , from Pond street to the Arborway | 4 00 |
| <i>Public Alley 902</i> , from Deerfield street to Raleigh street | 60 75 |
| <i>Public Alley 903</i> , from Haviland street to Public Alley 904 | 2,137 13 |
| <i>Public Alley 904</i> , from Bickerstaff street to Public Alley 903 | 664 52 |
| <i>Ralston street</i> , from Dorchester avenue to Old Colony avenue | 378 26 |
| <i>Randall street</i> , from Harrison avenue to Albany street | 5,052 09 |
| <i>Raven street</i> , from Crescent avenue southerly | 05 |
| <i>Redfield street</i> , from Port Norfolk street to Walnut street | 134 38 |
| <i>Richwood street</i> , from Centre street to Montview street | 70 88 |
| <i>Ripley road</i> , from Vassar street to Harvard street, | 4,664 97 |
| <i>Rosewood street</i> , from Oakland street to Randolph road | 13,879 97 |
| <i>Rowell street</i> , from Hancock street to Cushing avenue | 108 99 |
| <i>Rugby road</i> , from Randolph avenue to Oakland street | 116 24 |
| <i>St. Albans road</i> , from Francis street to Huntington avenue | 3,369 12 |
| <i>St. Andrew road</i> , from Bayswater street to Washburn avenue | 1,017 53 |
| <i>St. William street</i> , from Dorchester avenue to Auckland street | 33 95 |
| <i>Santuit street</i> , from Roseland street to Welles avenue | 98 98 |
| <i>Saville street</i> , from Park street to Stratford street, | 2 56 |
| <i>Schiller road</i> , from Rockland street to Dedham line | 30 |
| <i>Seaver street</i> , southwest side, from Walnut avenue to Humboldt avenue | 2,589 36 |
| <i>Seaver street</i> , southeast side, from Humboldt avenue to Blue Hill avenue | 509 15 |
| <i>Carried forward</i> | \$239,730 72 |

| | |
|---|--------------|
| <i>Brought forward</i> | \$239,730 72 |
| <i>Selwyn street</i> , from Farquhar street 1,174 feet northeasterly | 28 31 |
| <i>South street</i> , from Commonwealth avenue to Chest- nut Hill avenue | 6 50 |
| <i>South Sydney street</i> , from Savin Hill avenue to Bay street | 15 |
| <i>Southwick street</i> , from Neponset avenue to Free- port street | 515 01 |
| <i>Spring street</i> , from Webster street to the Charles river | 4,825 41 |
| <i>St. Rose street</i> , extended to South street | 33 18 |
| <i>Stratton street</i> , from Blue Hill avenue to Lucerne street | 18 30 |
| <i>Sturtevant street</i> , from Park street to Gibson street, | 6,269 43 |
| <i>Temple street</i> , from Spring street to Ivory street | 3,529 00 |
| <i>Theodore street</i> , from Morton street to 618 feet easterly | 1,191 12 |
| <i>Trent street</i> , from Coleman street to Clarkson street | 423 20 |
| <i>Tuckerman street</i> , from Dorchester street to Middle street | 2,445 27 |
| <i>Turner street</i> , from Washington street to Faneuil street | 85 88 |
| <i>Upland avenue</i> , from Park street to Melville avenue | 5,708 15 |
| <i>Vista street</i> , from Augustus avenue to Malvern road | 1,052 29 |
| <i>Wait street</i> , from Hillside street to Sachem street, | 3,350 61 |
| <i>Waldo terrace</i> , from Washington street to Henshaw street | 31 65 |
| <i>Walley street</i> , from Gladstone street to Waldemar avenue | 5 67 |
| <i>Washington street</i> , from Morton street to Asticou road | 5,936 97 |
| <i>Wellington Hill footway</i> , from Wellington Hill street to Walk Hill street | 15 02 |
| <i>Wensley street</i> , from Bucknam street to Bickford avenue | 129 28 |
| <i>Westmoreland street</i> , from Adams street 708 feet westerly | 35 |
| <i>Westwood street</i> , from Richfield street to Wales place | 2,429 63 |
| <i>Whitfield street</i> , from Talbot avenue to Norfolk street | 6 50 |
| <i>William Jackson avenue</i> , from Chestnut Hill avenue to Academy Hill road | 18 68 |
| <i>Willow court</i> , extended to Massachusetts avenue, | 128 50 |
| <i>Carried forward</i> | \$277,914 78 |

PUBLIC WORKS DEPARTMENT.

291

| | | |
|---|------------|----------------------------|
| <i>Brought forward</i> | | \$277,914 78 |
| <i>Wilmington avenue</i> , from Milton avenue to Nevada street | | 9 00 |
| <i>Woodworth street</i> , from Walnut street to Redfield street | | 8 19 |
| <i>Wordsworth street footbridge</i> , over Boston, Revere Beach & Lynn Railroad | | 3,027 68 |
| <i>Wordsworth street</i> , from Horace street to Coleridge street | | 4 47 |
| <i>Worthington street</i> , from Longwood avenue to Fenway | | 4,002 53 |
| <i>Wyoming street</i> , extended to Humboldt avenue | | 6 75 |
| Total | | <u>\$284,973 40</u> |
| Less amount due Paving Service | \$1,318 60 | |
| Less amount due reconstructing and repairing streets by contract, | 10 01 | |
| | | <u>1,328 61</u> |
| Total | | <u><u>\$283,644 79</u></u> |

PUBLIC WORKS DEPARTMENT—HIGHWAY DIVISION—PAVING SERVICE.

Maintenance of Macadam Streets.

Table showing cost by years of resurfacing or patching from February 1, 1913, to January 31, 1917.

| | 1913. | 1914. | 1915. | 1916. |
|---|--------------|--------------|--------------|--------------|
| Total length of macadam in miles..... | 338.14 | 392.27 | 396.28 | 392.91 |
| Total area of macadam in square yards..... | 7,029,632 | 7,092,634 | 7,147,804 | 7,088,095 |
| Total cost of resurfacing of macadam *..... | \$252,127 10 | \$317,134 41 | \$170,760 85 | \$115,268 20 |
| Total cost of patching of macadam †..... | \$95,645 60 | \$102,847 01 | \$136,059 01 | \$114,113 82 |
| Cost of resurfacing per mile over entire mileage..... | \$649 58 | \$808 46 | \$430 91 | \$293 37 |
| Cost of resurfacing per square yard over entire area..... | \$0 686 | \$0 045 | \$0 024 | \$0 016 |
| Length of macadam resurfaced yearly in miles..... | 22.6 | 26.2 | 13.4 | 11.5 |
| Cost per mile of macadam resurfaced yearly..... | \$11,156 07 | \$12,104 37 | \$12,743 35 | \$10,023 32 |
| Area of macadam resurfaced yearly in square yards..... | 338,591 | 381,063 | 185,215 | 179,093 |
| Cost per square yard of macadam resurfaced yearly..... | \$0 749 | \$0 832 | \$0 922 | \$0 644 |
| Area of macadam patched yearly in square yards..... | 417,059 | 477,863 | 680,479 | 445,637 |
| Cost per square yard of macadam patched yearly..... | \$0 229 | \$0 215 | \$0 200 | \$0 256 |
| Binders used (per cent): | | | | |
| Water..... | 39.73 | 23.04 | 13.29 | 19.80 |
| Tar preparations..... | 42.99 | 51.13 | 34.88 | 54.96 |
| Asphalt preparations..... | 17.23 | 25.83 | 51.83 | 25.24 |

* By resurfacing is meant entire area of street excavated and resurfaced with not less than four inches of new material.

† By patching is meant scattered areas of depressions, etc., which are filled with new material from a depth of one-half inch up.

New Edgestones. (Does not include work done on streets laid out and constructed under chapter 393 of the Acts of 1906.)

First Setting. Linear Feet.

| YEAR. | South Boston. | East Boston. | Charlestown. | Brighton. | West Roxbury. | Dorchester and Hyde Park. | Roxbury. | City Proper. | Totals. |
|------------|---------------|--------------|--------------|-----------|---------------|---------------------------|----------|--------------|---------|
| 1907..... | 414 | 1,263 | 250 | 908 | 349 | 4,781 | 1,663 | 534 | 10,162 |
| 1908..... | 656 | 798 | ..... | 2,405 | 2,399 | 3,654 | 4,811 | 813 | 15,536 |
| 1909..... | 723 | 2,898 | ..... | 214 | 779 | 4,833 | 2,380 | 5,253 | 17,080 |
| 1910..... | 328 | 1,182 | 100 | 983 | 5,190 | 8,044 | 6,810 | 50 | 22,687 |
| 1911..... | 1,718 | 465 | ..... | 2,098 | 11,627 | 14,627 | 5,806 | 352 | 36,693 |
| 1912..... | 6,045 | 1,017 | 229 | 1,806 | 7,890 | 9,669 | 3,168 | 407 | 30,231 |
| 1913..... | 2,199 | 557 | 70 | 1,221 | 2,907 | 10,296 | 2,716 | 1,359 | 21,325 |
| 1914..... | 4,773 | 959 | ..... | 1,970 | 1,520 | 1,637 | 901 | 672 | 12,432 |
| 1915..... | 947 | 265 | ..... | 4,939 | 2,230 | 6,928 | 4,547 | 331 | 20,187 |
| 1916..... | 221 | 1,906 | ..... | 1,987 | 2,393 | 3,378 | 1,968 | 638 | 12,578 |
| Totals.... | 18,024 | 11,400 | 649 | 18,531 | 37,284 | 67,847 | 34,767 | 10,409 | 198,911 |

New Brick Sidewalks. (Does not include work done on streets laid out and constructed under chapter 393 of the Acts of 1906.)

First Laying. Square Yards.

| YEAR. | South Boston. | East Boston. | Charlestown. | Brighton. | West Roxbury. | Dorchester and Hyde Park. | Roxbury. | City Proper. | Totals. |
|------------|---------------|--------------|--------------|-----------|---------------|---------------------------|----------|--------------|---------|
| 1907..... | 455 | 1,157 | 223 | 250 | 278 | 856 | 296 | 313 | 3,828 |
| 1908..... | 217 | 836 | ..... | ..... | 400 | 958 | 884 | ..... | 3,295 |
| 1909..... | 311 | 2,597 | ..... | ..... | 156 | 406 | 5,359 | ..... | 8,829 |
| 1910..... | 1,292 | 974 | 42 | 166 | 987 | 596 | 2,230 | ..... | 6,287 |
| 1911..... | 520 | 364 | ..... | ..... | ..... | 460 | 1,469 | 314 | 3,127 |
| 1912..... | 2,249 | 623 | ..... | ..... | ..... | 208 | 716 | ..... | 3,796 |
| 1913..... | 490 | 465 | ..... | ..... | 80 | 103 | 647 | 86 | 1,871 |
| 1914..... | 762 | 379 | ..... | ..... | ..... | 150 | 382 | 585 | 2,258 |
| 1915..... | 287 | 465 | ..... | 150 | ..... | ..... | 501 | ..... | 1,403 |
| 1916..... | 125 | 175 | ..... | ..... | ..... | ..... | 366 | ..... | 666 |
| Totals.... | 6,708 | 8,035 | 265 | 566 | 1,901 | 3,737 | 12,850 | 1,298 | 35,360 |

Recapitulation, 1916.

| | Edgestones. <i>Linear Feet.</i> | Brick. <i>Square Yards.</i> |
|---|------------------------------------|--------------------------------|
| South Boston Paving District, No. 1..... | 221 | 125 |
| East Boston Paving District, No. 2..... | 1,996 | 175 |
| Charlestown Paving District, No. 3..... | ..... | ..... |
| Brighton Paving District, No. 4..... | 1,987 | ..... |
| West Roxbury Paving District, No. 5..... | 2,393 | ..... |
| Dorchester and Hyde Park Paving Districts, Nos. 6, 9-11..... | 3,378 | ..... |
| Roxbury Paving District, No. 7..... | 1,965 | 366 |
| City Proper Paving Districts, Nos. 8 and 10.. | 638 | ..... |
| Totals..... | 12,578 | 666 |

Loads of Dirt and Street Cleanings Removed from February 1,
1916, to January 31, 1917.*By Paving Service Force.*

| DISTRICTS. | Single.* | Double.† | Cubic Yards. |
|-------------------|----------|----------|-----------------|
| South Boston..... | 2,766 | 120 | 3,006 |
| East Boston..... | 163 | 163 | 489 |
| Charlestown..... | 488 | ..... | 488 |
| Brighton..... | 2,492 | 2,104 | 6,700 |
| West Roxbury..... | 4,019 | 2,171 | 8,361 |
| Dorchester..... | 403 | 408 | 1,219 |
| Roxbury..... | 3,790 | 2,035 | 7,860 |
| South End..... | 686 | 530 | 1,746 |
| Ashmont..... | 526 | 1,180 | 2,886 |
| North End..... | 1,034 | 1 | 1,036 |
| Hyde Park..... | 2,836 | 858 | 4,552 |
| Totals..... | 19,203 | 9,570 | 38,343 |

* Single load, 1 cubic yard.

† Double load, 2 cubic yards.

*** Loads of Snow Removed from February 1, 1916, to January 31, 1917.**

| DISTRICTS. | Single.† | Double.‡ | Cubic Yards. | Cost.§ |
|--------------------|---------------|--------------|---------------|---------------------|
| South Boston..... | 14,485 | 594 | 30,752 | \$13,492 37 |
| East Boston..... | 933 | 63 | 2,055 | 5,992 93 |
| Charlestown..... | 1,641 | 269 | 4,089 | 8,416 05 |
| Brighton..... | 157 | 28 | 398 | 8,876 96 |
| West Roxbury..... | 2,390 | 1,614 | 9,622 | 13,717 49 |
| Dorchester..... | 953 | 298 | 2,800 | 9,603 31 |
| Roxbury..... | 1,980 | 393 | 5,139 | 24,916 16 |
| South End..... | 3,585 | 1,988 | 13,134 | 22,170 22 |
| Ashmont..... | 1,037 | 922 | 4,840 | 5,734 37 |
| North End..... | 3,339 | 196 | 7,266 | \|\|19,964 78 |
| Hyde Park..... | 914 | 1,138 | 5,242 | 5,464 79 |
| Totals..... | 31,414 | 7,503 | 58,337 | \$138,349 43 |

* Does not include snow removed by contract.

† Single loads, 2 cubic yards.

‡ Double loads, 3 cubic yards.

§ Includes cost of plowing gutters, cleaning sidewalks and picking ice not carted away.
|| Includes cost of license, engineering, inspection, advertising, etc., on contract work amounting to \$4,315.17.

Snow and Ice Removal by Contract.

From February 1, 1916, to January 31, 1917.

| DISTRICTS. | Number of Loads.* | Cubic Yards. | Cost per Cubic Yard. | Total Cost. | |
|---------------------------|-------------------|----------------|----------------------|--------------------|----------------|
| Snow District No. 1.....{ | 4,902 | 17,602½ | \$0 44 | \$7,745 10 | 1915 contract. |
| | 1,390 | 5,000 | 43 | 2,150 00 | 1916 contract. |
| Snow District No. 2.....{ | 1,279 | 5,200 | 33 | 1,716 01 | 1915 contract. |
| | 341 | 1,240½ | 42 | 521 01 | 1916 contract. |
| Snow District No. 3.....{ | 3,106 | 12,549 | 31 | 3,890 20 | 1915 contract. |
| | 311 | 1,778½ | 45 | 800 33 | 1916 contract. |
| Snow District No. 4.....{ | 4,887 | 17,217½ | 37 | 6,370 49 | 1915 contract. |
| | 189 | 1,553½ | 38 | 590 33 | 1916 contract. |
| Snow District No. 5.....{ | 2,788 | 9,910½ | 40 | 3,964 20 | 1915 contract. |
| | 690 | 2,512½ | 49 | 1,231 13 | 1916 contract. |
| Snow District No. 6.....{ | 4,176 | 16,515½ | 37 | 6,110 74 | 1915 contract. |
| | 922 | 3,971 | 40 | 1,588 40 | 1916 contract. |
| Snow District No. 7.....{ | 4,253 | 14,773½ | 35 | 5,170 74 | 1915 contract. |
| | 923 | 3,903½ | 40 | 1,561 40 | 1916 contract. |
| Totals..... | 30,157 | 113,728 | \$0 378 | \$43,110 08 | |

* The capacity of the loads varies from two (2) to ten (10) cubic yards.

Summary of Volume and Cost of Snow Removed, Year Ending January 31, 1917.

| WORK DONE BY | Districts. | TRAMS AND AUTO TRUCKS. | | TOTAL TRAMS AND AUTO TRUCKS. | | Cubic Yards. | Total Cost. | Cost per Cubic Yard. | Total Cost per Cubic Yard. |
|------------------------------------|---------------------------|------------------------|---------|------------------------------|-----------|--------------|---------------|----------------------|----------------------------|
| | | Single. | Double. | Single. | Double. | | | | |
| Paving Service, day work. | South Boston..... | 14,485 | 594 | | | 30,752 | \$13,492 37 | | |
| | East Boston..... | 933 | 63 | | | 2,055 | 5,992 93 | | |
| | Charlestown..... | 1,641 | 269 | | | 4,089 | 8,416 05 | | |
| | Brighton..... | 157 | 28 | | | 398 | 8,376 96 | | |
| | West Roxbury..... | 2,380 | 1,014 | | | 9,622 | 13,717 49 | | |
| | Dorchester..... | 953 | 288 | | | 2,800 | 9,603 31 | | |
| | Roxbury..... | 1,980 | 393 | | | 5,139 | 24,916 16 | | |
| | South End..... | 3,535 | 1,983 | | | 13,134 | 22,170 22 | | |
| | Ashmont..... | 1,037 | 922 | | | 4,840 | 5,734 37 | | |
| | North End..... | 3,339 | 196 | | | 7,266 | 19,964 78 | | |
| Paving Service, contracts. | Hyde Park..... | 914 | 1,138 | \$ 31,414 | \$ 7,503 | 5,242 | 5,464 79 | | \$138,249 43 |
| | Snow District No. 1..... | | 6,292 | | | 22,602 | \$9,895 10 | \$0 435 | |
| | Snow District No. 2..... | | 1,620 | | | 6,440 | 2,237 02 | 375 | |
| | Snow District No. 3..... | | 3,417 | | | 14,327 | 4,690 53 | 38 | |
| | Snow District No. 4..... | | 5,076 | | | 18,771 | 6,960 82 | 375 | |
| | Snow District No. 5..... | | 3,478 | | | 12,423 | 5,195 23 | 445 | |
| | Snow District No. 6..... | | 5,098 | | | 20,496 | 7,699 14 | 385 | |
| | Snow District No. 7..... | | 5,176 | | | 18,677 | 6,732 14 | 375 | |
| | South Boston..... | 4,554 | | | \$ 30,157 | 11,810 4 | \$3,197 73 | \$0 270 | \$0 3815 |
| | East Boston..... | 510 | | | | 1,326 | 803 71 | 606 | |
| Street Cleaning Service, day work. | Charlestown..... | 700 | | | | 1,820 | 787 14 | 432 | |
| | Dorchester..... | 218 | | | | 646 8 | 425 10 | 767 | |
| | Roxbury..... | 358 | | | | 930 8 | 883 20 | 948 | |
| | South End, up town..... | 655 | | | | 1,703 | 940 91 | 552 | |
| | South End, down town..... | 30,998 | | | | 80,699 6 | 36,813 61 | 466 | |
| | Back Bay..... | 2,190 | | | | 5,694 | 3,189 78 | 560 | |
| | North End..... | 30,596 | | | | 79,315 6 | 24,055 18 | 429 | |
| | North and West Ends..... | 12,766 | | | | 32,191 6 | 27,274 80 | 821 | |
| | Patrol System..... | | | \$ 83,453 | | | \$ 108,371 16 | | |
| | Totals..... | | | 114,867 | 37,660 | 389,040 | \$290,130 67 | | \$0 499 |

1 Single loads, 2 cubic yards.

2 Double loads, 3 cubic yards.

3 63,703 cubic yards removed under 1915 contract.

4 Includes cost of plowing gutters, cleaning sidewalks and picking ice not carted away.

5 Includes Sunday, paid time and one half and holidays double time.

6 Capacity of loads varies from 2 to 10 cubic yards.

7 Single loads, 2.6 cubic yards.

8 Does not include \$13,439.72 spent by Street Cleaning Service for cleaning cross-walks and gutters not carted away.

STREET OPENINGS.

Under Classes 1 and 2 of the schedule of permit fees, permits for openings in public ways were issued as follows:

| | Permits. | Length in Feet. |
|---|----------|-----------------|
| City of Boston Fire Department..... | 47 | 4,276 |
| City of Boston Police Department..... | 18 | 841 |
| City of Boston Schoolhouse Commission..... | 7 | 816 |
| City of Boston Sewer Service..... | 255 | 4,519 |
| City of Boston Water Service..... | 1,739 | 43,763 |
| Boston Consolidated Gas Company..... | 1,814 | 60,181 |
| Boston Elevated Railway Company..... | 276 | 113,435 |
| Charlestown Gas and Electric Company..... | 148 | 5,380 |
| Dedham and Hyde Park Gas and Electric Com- pany..... | 63 | 2,130 |
| East Boston Gas Company..... | 159 | 9,275 |
| Edison Electric Illuminating Company..... | 2,745 | 203,760 |
| New England Telephone and Telegraph Com- pany..... | 467 | 55,660 |
| Miscellaneous..... | 2,708 | 232,395 |
| Bay State Street Railway Company..... | 27 | 1,425 |
| Quincy Market Cold Storage Company..... | 12 | 420 |
| Eastern Cold Storage Company..... | 10 | 735 |
| Western Union Telegraph Company..... | 6 | 175 |
| Emergency Class A..... | 910 | ..... |
| Emergency Class A, returned as used..... | 604 | ..... |
| Estimated length..... | | 15,100 |
| Totals..... | 12,015 | 754,286 |

Making a total length of openings of about 143 miles.

Permits for occupation of public ways for purposes other than openings have been issued as follows:

| | |
|--|-------|
| Advertising by men wearing lettered hat and coat | 67 |
| Cleaning snow from roof | 83 |
| Driving cattle through the streets | 8 |
| Dumping snow in public alleys | 18 |
| Erecting and repairing awnings | 1,320 |
| Erecting and repairing buildings | 3,121 |
| Painting or minor repairs | 4,317 |
| Feeding horses on streets | 626 |
| Moving buildings in streets | 24 |
| Placing signs flat on buildings | 873 |
| Projecting signs or lamps | 668 |
| Raising or lowering safes or heavy machinery | 237 |

Carried forward 11,362

| | |
|---|---------------|
| <i>Brought forward</i> | 11,362 |
| Emergency permits (Class B) | 317 |
| Special permits for other than the above purposes | 55 |
| Annual permits for other purposes | 214 |
| Total | 11,948 |
| Total for openings in public ways | 12,015 |
| Total of all permits issued | <u>23,963</u> |

The income from the issuance of permits amounted to \$27,922.44, divided as follows:

| | |
|--|--------------------|
| Class No. 1. Openings | \$5,861 50 |
| 2. Emergency openings | 569 00 |
| 3. Advertising | 71 00 |
| 4. Cleaning snow from roofs | 83 00 |
| 5. Driving cattle | 40 00 |
| 6. Dumping snow | 9 00 |
| 7. Erecting and repairing awnings | 660 00 |
| 8. Erecting, alterations and repairs on buildings | 15,128 69 |
| 9. Minor repairs on buildings | 2,158 50 |
| 10. Feeding horses | 626 00 |
| 11. Moving buildings | 295 00 |
| 12. Painting signs on fences | 0 00 |
| 13. Placing flat signs | 448 50 |
| 14. Projecting signs, etc. | 668 00 |
| 15. Raising and lowering goods, etc. | 245 00 |
| 16. Loading and unloading goods | 0 00 |
| 17. Emergency (Class B) | 317 00 |
| 18. Special | 13 75 |
| 19. Annual permits | 728 50 |
| Total | <u>\$27,922 44</u> |

Twenty-two thousand, nine hundred eighty dollars and sixty-five cents cash paid to City Collector. Bills for collection of balance, \$4,941.79.

One thousand, eight hundred and forty-three surety company bonds are on file in the Permit Office. These include twenty thousand, four thousand, three thousand and one thousand dollar bonds.

DEFECTS IN SIDEWALKS AND ROADWAYS.

Four hundred twenty-two notices were sent to property owners to make repairs to sidewalks for the mainte-

dance of which they were responsible. These included steps, portions of buildings encroaching on sidewalks, and defective bulkheads, areas, etc.

Twenty-six thousand three hundred thirty-three notices were sent to district foremen, contractors, public service corporations and others to make repairs in the streets where defects existed on account of work for which they were responsible.

Permits have been issued for the placing of four hundred twenty poles and the removal of one hundred sixty-six poles in accordance with plans filed in this office. Permits have also been issued for the resetting of ten hundred ninety-seven defective poles.

STREET NUMBERING.

Building numbers have been assigned as listed below:

| | Entire Streets Num- bered. | Entire Streets Renum- bered. | Partly Num- bered Streets. | Partly Renum- bered Streets. | Estates Num- bered. | Estates Renum- bered. | Figures Issued. |
|-------------------|-------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|---------------------------|-----------------------------|--------------------|
| East Boston..... | | | | | 55 | 3 | 151 |
| Charlestown..... | | | | | 37 | | 84 |
| Boston..... | 1 | 1 | 6 | 1 | 267 | 14 | 666 |
| South Boston..... | 1 | | 1 | | 101 | 8 | 282 |
| Roxbury..... | | 2 | 2 | | 220 | 34 | 553 |
| West Roxbury..... | 1 | | 7 | | 487 | 20 | 1,244 |
| Dorchester..... | 5 | 1 | 21 | | 704 | 44 | 1,763 |
| Brighton..... | 7 | 1 | 10 | | 333 | 6 | 617 |
| Hyde Park..... | | | 3 | | 103 | 7 | 281 |
| Totals..... | 15 | 5 | 50 | 1 | 2,307 | 136 | 5,641 |

PLANS.

During the year plans were filed as follows:

| | Mains. | Poles. | Tracks. | Conduits. | Miscellaneous. |
|--|--------|--------|---------|-----------|----------------|
| New England Telephone and Telegraph Company..... | | 49 | | 77 | |
| Edison Electric Illuminating Company..... | | 88 | | 393 | |
| Boston Consolidated Gas Company..... | 24 | | | | |
| East Boston Gas Company..... | 2 | | | | |
| Dedham and Hyde Park Gas and Electric Company..... | 4 | | | | |
| Charlestown Gas and Electric Company..... | 4 | | | | |
| Boston Elevated Railway Company..... | | | 16 | 5 | 1 |
| Eastern Cold Storage Company..... | | | | 1 | |
| Boston Fire Department..... | | | | 16 | |
| Boston Pneumatic Transit Company..... | | | | 1 | |
| Boston Low Tension Wire Association..... | | | | 1 | |
| Boston Schoolhouse Commission..... | | | | 3 | |
| Bay State Street Railway Company..... | | 1 | 3 | 1 | |
| Boston Police Department..... | | | | 1 | |
| Western Union Telegraph Company..... | | | | 1 | |
| Boston Auxiliary Fire Alarm..... | | | | 2 | |
| Union Freight Railroad Company..... | | | 1 | | |
| Miscellaneous..... | | | | | 40 |
| Totals..... | 34 | 138 | 20 | 502 | 41 |

Poles, 138; mains, 34; tracks, 20; conduits, 502; miscellaneous, 41; total of 735 plans filed this year, making a total of plans on file of 13,653.

TABLE SHOWING THE UNIT COST OF ASPHALT AND BITULITHIC REPAIRS PER SQUARE YARD OF STREET SURFACE FROM 1907 TO 1916, INCLUSIVE.

Trinidad Asphalt.
City Proper.

| Street. | Limits. | Year Laid. | 1907. | 1908. | 1909. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
|--------------------------|--|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Albany street..... | 80 feet north of Broadway, across Way street. | 1899 | \$0.009 | ..... | \$0.005 | ..... | ..... | ..... | ..... | ..... | \$0.267 | ..... |
| Albany street..... | East Concord street to 225 feet north of Massachusetts avenue. | 1894 | .086 | \$0.124 | .401 | \$0.346 | \$0.284 | \$0.235 | \$0.150 | \$0.174 | .311 | \$0.059 |
| Andrews street..... | East Dedham street to East Concord street. | 1899 | ..... | ..... | * | ..... | ..... | ..... | ..... | ..... | .009 | ..... |
| Arch street..... | Franklin street to Milk street..... | 1893 | *.083 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | † | ..... |
| Arch street..... | 200 feet south of Milk street to Franklin street. | 1893 | ..... | .329 | .145 | † | ..... | ..... | ..... | ..... | † | ..... |
| Arlington street..... | Boylston street to Beacon street..... | 1901 | ..... | ..... | ..... | ..... | *.010 | .002 | .014 | .015 | .056 | .008 |
| Ash street..... | Bennet street to Nassau street..... | 1887 | ..... | ..... | † | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Avon street..... | Washington street to Chauncy street.. | 1901 | ..... | ..... | ..... | ..... | *.028 | .023 | .146 | .045 | .139 | .064 |
| Barton court..... | Barton street to Brighton street..... | 1894 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | * | ..... | ..... |
| Batterymarch street..... | Milk street to Liberty square..... | 1896 | .070 | .030 | .013 | .060 | .196 | .319 | .043 | .067 | .167 | .119 |
| Beacon street..... | Charles street, across Arlington street, | 1891 | .167 | †.062 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Beacon street..... | Charles street to Brimmer street..... | 1891 | ..... | .109 | .004 | .074 | .192 | ..... | .653 | ..... | ..... | ..... |
| Beacon street..... | Charles street to Brimmer street and southerly side to Arlington street. | 1891-1901 | ..... | ..... | ..... | ..... | ..... | .046 | ..... | .078 | .217 | .056 |

Cost of Trinidad Asphalt Repairs, 1907-16.— Continued.
City Proper.— Continued.

| Street. | Limits. | Year Laid. | 1907. | 1908. | 1909. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
|----------------------|--|---------------|---------|---------|----------|---------|---------|---------|---------|---------|---------|---------|
| Beacon street..... | Easterly side of Dartmouth street to within 150 feet of westerly line of Gloucester street. | 1892 | \$0.063 | \$0.084 | †\$0.028 | | | | | | | |
| Beacon street..... | Dartmouth street to Hereford street.. | 1909 | | | | | | | | | | |
| Beacon street..... | 150 feet from westerly line of Gloucester street to 78 feet beyond westerly line of Gloucester street. | 1898 | | .010 | †.003 | | | | | | \$0.018 | \$0.024 |
| Beacon street..... | 78 feet west of Gloucester street to Massachusetts avenue. | 1893 | †.001 | | | | | | | | | |
| Beacon street..... | 78 feet west of Gloucester street to Hereford street. | 1893 | | †.042 | †.018 | | | | | | | |
| Berkeley street..... | Boylston street to 155 feet south of Boylston street. | 1902 | | | | | | | \$0.128 | \$0.032 | | |
| Bennet street..... | 90 feet west of Harrison avenue to 162 feet east of Washington street. | 1887 | | | | | | | | | | |
| Bennet street..... | Ash street to Harrison avenue..... | 1905 | | | | | | | | | | .479. |
| Bond street..... | Hanson street to Milford street..... | 1895 | | .037 | | \$0.036 | \$0.030 | \$0.049 | .040 | .082 | | |
| Boylston street..... | Tremont street to Boylston place..... | 1901 | | | | | *.078 | .322 | .267 | .385 | \$ | |
| Boylston street..... | Charles street to Arlington street..... | 1901 | | | | | *.051 | .670 | .052 | | \$ | |
| Boylston street..... | Easterly side of Berkeley street, across Clarendon street. | 1897 | †.157 | .226 | .038 | †.098 | | .043 | | \$ | | |
| Boylston street..... | Clarendon street, across Dartmouth street. | 1901 | | | | | *.021 | .056 | | | † | |

Cost of Trinidad Asphalt Repairs, 1907-16.—Continued.

City Proper.—Continued.

| STREET. | Limits. | Year Laid. | 1907. | 1908. | 1909. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
|------------------------|---|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Columbus avenue..... | Massachusetts avenue to 301 feet south of Camden street. | 1896 | † | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Congress square..... | Congress square to Congress street.... | 1883-1900 | \$0.127 | \$0.007 | ..... | \$0.061 | \$0.116 | ..... | \$0.051 | \$0.013 | \$0.711 | ..... |
| Cooper street..... | North Margin street to Endicott street. | 1887 | .340 | .339 | \$0.170 | .663 | .361 | \$0.426 | .457 | .329 | 1.232 | \$0.562 |
| Cooper street..... | Endicott street to Washington Street North. | 1897 | ..... | † | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Corning street..... | Washington street to Shawmut avenue. | 1883-96 | .487 | .061 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Court street..... | Washington street to Court square.... | 1891-1904 | ..... | ..... | ..... | ..... | ..... | ..... | .027 | .233 | .299 | .290 |
| Court square..... | Easterly and southerly side..... | 1881-94 | .097 | .191 | .046 | .193 | .290 | .113 | .021 | ..... | .160 | ..... |
| Court square..... | West side, from 148 to 8 feet south of Court street. | 1904 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | .066 |
| Dartmouth street..... | Boylston street to Newbury street.... | 1894 | .026 | .067 | ..... | .023 | .110 | .060 | .049 | .091 | ..... | ..... |
| Dartmouth street..... | Huntington avenue to Boylston street. | 1901 | ..... | ..... | ..... | ..... | *.039 | .008 | ..... | .011 | ..... | .276 |
| Dartmouth street..... | Buckingham street to 101 feet north- ealy. | 1899 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Davis street..... | Washington street to Harrison avenue. | 1892 | .081 | .100 | .173 | .332 | .184 | .680 | .106 | .130 | .211 | .208 |
| Devonshire street..... | Milk street to Water street..... | 1909 | ..... | ..... | ..... | * | .056 | .099 | .459 | .431 | 1.437 | .291 |
| Devonshire street..... | Milk street to Franklin street..... | 1905 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | *.426 | .420 |
| Dillon street..... | Lenox street to Sawyer street..... | 1902 | ..... | ..... | ..... | ..... | ..... | * | .010 | ..... | .068 | ..... |
| Doane street..... | Kilby street to Broad street..... | 1881 | .068 | .307 | .055 | †.189 | .631 | .224 | .058 | .034 | .046 | ..... |

Cost of Trinidad Asphalt Repairs, 1907-16.—Continued.

City Proper.—Concluded.

| STREET. | Limita. | Year Laid. | 1907. | 1908. | 1909. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
|---------------------------|---|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Public Alley No. 428..... | Between Commonwealth avenue and Marlborough street, from Gloucester street to 205 feet east of Herford street. | 1901 | ..... | ..... | ..... | ..... | * | ..... | \$0.017 | ..... | ..... | ..... |
| Spring street..... | Poplar street to Leverett street..... | 1895 | \$0.381 | \$0.440 | \$0.069 | \$0.128 | \$0.333 | \$0.160 | .183 | \$0.128 | \$0.454 | \$0.422 |
| Sevens street..... | Lincoln place, toward Shawmut ave.... | 1897 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Stillman street..... | Endicott st., across North Margin st.. | 1892 | .047 | .349 | .009 | .005 | .035 | .041 | .286 | .157 | .061 | .150 |
| Stoddard street..... | Howard street to Court street..... | 1892 | .040 | .049 | ..... | .176 | .127 | .023 | .076 | .066 | ..... | .543 |
| Sun-court street..... | North street to Moon street..... | 1891 | .101 | .304 | .118 | .060 | .245 | .190 | .119 | .043 | ..... | .130 |
| Temple place..... | Washington street to Tremont street, | 1900 | ..... | ..... | ..... | *.017 | .154 | .086 | .183 | .208 | .504 | .025 |
| Thacher street..... | Washington St. North to Endicott st., | 1892 | .168 | .405 | .014 | .226 | .267 | .127 | .453 | .093 | .409 | .214 |
| Tileston street..... | Unity street to Salem street..... | 1895 | .025 | .270 | ..... | .228 | .640 | .385 | .306 | .057 | .243 | ..... |
| Tileston street..... | Hanover street to Unity street..... | 1905 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Tremont street..... | Sollay square to Boylston street (minus Beacon street intersection). | 1900 | ..... | ..... | ..... | *.074 | .319 | .228 | .421 | .374 | \$1.388 | ..... |
| Trinity place..... | St. James ave., across Stanhope street, | 1900 | ..... | ..... | ..... | *.007 | .013 | †.127 | .136 | .002 | .033 | ..... |
| Unity street..... | Charter street to Tileston street..... | 1897 | .197 | .182 | .013 | .126 | .030 | .300 | .071 | .078 | .249 | .284 |
| Warrenton street..... | Elliot street to Tremont street..... | 1894-91 | .431 | .112 | .038 | .319 | .431 | .059 | .256 | .063 | .339 | .049 |
| Warrenton street..... | Shawmut avenue to Washington street, | 1891 | .698 | .120 | .050 | .233 | .604 | .008 | .168 | .125 | .050 | .025 |
| Water street..... | Congress street to Kilby street..... | 1902 | ..... | ..... | ..... | ..... | ..... | * | .014 | .026 | .155 | ..... |
| Water street..... | Liberty square to Broad street..... | 1896 | .029 | .025 | .038 | .059 | .213 | .070 | .060 | .017 | ..... | .051 |

| | | | | | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| Wiget street..... | 1897 | .060 | .186 | .045 | .046 | .342 | .159 | .029 | .066 | .010 | .500 |
| Wiggin street..... | 1887 | | | | | | | | | | |

Charlestown.

| | | | | | | | | | | | |
|---|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Austin street..... | 1891 | \$0.124 | \$0.151 | \$0.143 | \$0.173 | \$0.321 | \$0.109 | \$0.087 | \$0.164 | \$0.199 | \$0.372 |
| Bunker Hill street..... | 1897 | | | | | | | | .064 | | |
| Corey street..... | 1897 | .286 | .286 | | .129 | .247 | | .194 | .121 | .220 | |
| 124 feet north of Moulton street to Moulton street..... | | | | | | | | | | | |
| Joiner street..... | 1906 | | | | | | | | | | |
| Park street to Chelsea street..... | | | | | | | | | | | |
| Moulton street..... | 1897 | | .025 | | | .030 | | .043 | .034 | .200 | |
| Easterly side of Corey st. to Vine st., | 1897 | | .007 | .008 | .032 | .095 | | .044 | .029 | .099 | |
| Vine street to Bunker Hill street..... | | | | | | | | | | | |
| Bunker Hill street, 141 feet northw., | 1897 | .628 | .676 | .944 | | .154 | | .635 | .943 | | |
| Bunker Hill street, across Moulton st., | 1897 | | .031 | .007 | .027 | .039 | | .049 | .010 | | |
| Over Fitchburg Railroad..... | 1899 | 1.272 | .632 | .503 | 1.099 | .039 | .154 | .164 | .098 | .405 | .246 |

South Boston.

| | | | | | | | | | | | |
|--|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| D street..... | 1889 | \$0.137 | \$0.302 | \$0.126 | \$0.383 | \$0.284 | \$0.204 | \$0.211 | \$0.240 | \$0.770 | \$0.203 |
| E street..... | 1892 | | .213 | .025 | .225 | .055 | .075 | .018 | .229 | | .389 |
| E street..... | 1904 | | | | | | | | * .056 | | |
| I street..... | 1910 | | | | * | | | .001 | .003 | | |
| Rogers street..... | 1891 | | .074 | | .111 | | | | .068 | | |
| Dorchester street to Preble street..... | | | | | | | | | | | |
| 160 feet east of C st., toward D street, | 1905 | | | | | | | | | * | .084 |
| 153 feet west of E street, across E st., | 1892 | .027 | .117 | .007 | .134 | .002 | .016 | | .067 | .174 | .020 |

Cost of Trinidad Asphalt Repairs, 1907-16. — *Concluded.**Roxbury.*

| STREET. | Limits. | Year Laid. | 1907. | 1908. | 1909. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
|----------------------|--|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Cabot street..... | Tremont street to Ruggles street..... | 1891 | \$0.069 | \$0.078 | \$0.014 | \$0.144 | \$0.178 | \$0.173 | \$0.048 | \$0.107 | \$0.054 | \$0.030 |
| Cabot street..... | Easterly side of Ruggles street to Vernon street. | 1892 | ..... | .100 | .108 | .069 | .038 | .107 | .030 | .042 | .049 | .051 |
| Cabot street..... | Easterly side of Vernon street to Linden Park street. | 1897 | .013 | .161 | .024 | .011 | .058 | .006 | .030 | .042 | .056 | .005 |
| Columbus avenue..... | 301 feet south of Camden street, across Terry street. | 1896 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Roxbury street..... | Washington street to Guild row..... | 1904 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | *.024 | .117 | ..... |

Cost of Sicilian Rock Asphalt Repairs, 1907-16.

City Proper.

| STREET. | Limits. | Year Laid. | 1907. | 1908. | 1909. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
|--------------------|---------------------------------------|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| Acton street..... | Washington street to Bradford street, | 1896 | \$0.018 | \$0.129 | \$0.095 | \$0.052 | \$0.021 | \$0.241 | \$0.037 | \$0.037 | \$0.086 | ..... |
| Arch street..... | Summer street to Franklin street..... | 1901 | ..... | ..... | ..... | ..... | *.011 | .028 | .005 | .207 | † | ..... |
| Ash street..... | Oak street, across Nassau street..... | 1895 | .070 | ..... | † | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Avery street..... | Washington street to Mason street... | 1897 | ..... | .096 | .100 | ..... | .261 | .144 | ..... | † | ..... | ..... |
| Barton street..... | Leverett street to Milton street..... | 1895 | .035 | .101 | .005 | .025 | .134 | .054 | .084 | .011 | .661 | ..... |

PUBLIC WORKS DEPARTMENT.

311

| | | | | | | | | | | | | | | |
|---------------------------|------|------|------|------|--|------|--|--|--------|------|--------|------|------|------|
| Beacon street..... | 1901 | | | | | | | | * .161 | .039 | .072 | .072 | .058 | .041 |
| Boylston street..... | 1900 | | | | | * | | | .329 | .154 | .020 | | \$ | |
| Bradford street..... | 1897 | .018 | .010 | .021 | | .021 | | | .005 | .034 | .011 | .031 | .033 | .014 |
| Cobb street..... | 1897 | .006 | .008 | | | .047 | | | | .032 | | .024 | | |
| Decatur street..... | 1892 | .187 | .460 | .094 | | .379 | | | .404 | .283 | .187 | .127 | .064 | .449 |
| Dwight street..... | 1893 | .041 | .005 | .025 | | .028 | | | .012 | .050 | .280 | .043 | .001 | .066 |
| East Concord street..... | 1897 | | | | | | | | | .170 | | | | |
| Essex place..... | 1901 | | | | | | | | * .135 | .087 | .038 | .141 | .020 | .367 |
| Exeter place..... | 1897 | .105 | .008 | | | .074 | | | .043 | .045 | .025 | | .031 | .052 |
| Fabin street..... | 1895 | | .008 | | | | | | | | .058 | .101 | | .013 |
| Fay street..... | 1894 | .020 | .084 | .015 | | .083 | | | .058 | .375 | .016 | .032 | | .095 |
| Hamburg street..... | 1896 | .020 | .010 | .010 | | | | | .011 | | .089 | .039 | | .008 |
| Hanover street..... | 1896 | .122 | .234 | .137 | | .344 | | | .771 | .310 | .486 | .187 | .379 | .451 |
| Harrison avenue..... | 1903 | | | | | | | | | | * .043 | .064 | .305 | |
| Huntington avenue..... | 1896 | .035 | .039 | .128 | | .042 | | | .046 | .037 | .059 | .043 | .061 | .051 |
| India street..... | 1901 | | | | | | | | * | .536 | .215 | .224 | .365 | .268 |
| Marlborough street..... | 1901 | | | | | | | | * .025 | .006 | .027 | .016 | .005 | .002 |
| Mason street..... | 1894 | † | | | | | | | | | | | | |
| Mason street..... | 1901 | | | | | | | | * .505 | .104 | .055 | .061 | .059 | .063 |
| Massachusetts avenue..... | 1894 | .002 | .029 | .014 | | .080 | | | .062 | .068 | .071 | .138 | .066 | .268 |

Cost of Sicilian Rock Asphalt Repairs, 1907-16.—Continued.

City Proper.—Concluded.

| Street. | Limits. | Year Laid. | 1907. | 1908. | 1909. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
|---------------------------|---|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Massachusetts avenue..... | Harrison avenue to Albany street (southerly roadway). | 1894 | \$0.010 | \$0.055 | \$0.045 | \$0.165 | \$0.164 | \$0.056 | \$0.154 | \$0.106 | \$0.429 | \$0.157 |
| Massachusetts avenue..... | Huntington avenue to Boylston street. | 1904 | ..... | ..... | ..... | ..... | *.154 | .164 | .214 | .172 | .269 | .328 |
| Massachusetts avenue..... | Newbury street to Beacon street..... | 1901 | ..... | ..... | ..... | ..... | *.341 | .617 | .395 | .237 | .310 | .029 |
| Mayo street..... | Castle street to Cobb street..... | 1897 | ..... | .047 | .027 | ..... | ..... | .047 | ..... | .035 | ..... | ..... |
| Meander street..... | East Dedham street to Malden street. | 1896 | ..... | .015 | .089 | .116 | ..... | .010 | .049 | ..... | ..... | ..... |
| Morton street..... | Salem street to Endicott street..... | 1901 | ..... | ..... | ..... | ..... | * | ..... | .137 | .075 | ..... | .527 |
| Motte street..... | Washington street to Harrison avenue. | 1892-99 | .147 | .032 | .017 | ..... | .150 | ..... | .059 | .138 | ..... | .175 |
| Mystic street..... | Malden street to East Brookline street. | 1895 | .015 | .027 | .010 | .131 | .017 | .006 | .037 | .072 | .011 | ..... |
| Newland street..... | West Brookline st. to West Newton st., | 1902 | ..... | ..... | ..... | ..... | ..... | * | ..... | .061 | .014 | ..... |
| North Margin street..... | Thacher street, toward Endicott st. | 1897 | .077 | .105 | .003 | .011 | ..... | .085 | .021 | .053 | ..... | .034 |
| Norwich street..... | Mystic street to Meander street..... | 1896 | ..... | .014 | .016 | .042 | ..... | ..... | .043 | .024 | ..... | .008 |
| Ohio street..... | Washington st. to Shawmut ave..... | 1896 | .030 | .088 | .093 | .096 | .009 | .254 | ..... | .119 | ..... | ..... |
| Otter street..... | Beacon street to Riverway..... | 1901 | ..... | ..... | ..... | ..... | * | .016 | .003 | .015 | ..... | .003 |
| Pemberton square..... | Front of Suffolk Courthouse..... | 1894 | .002 | .013 | ..... | .017 | .029 | ..... | ..... | .006 | ..... | ..... |
| Prince street..... | Hanover street to Salem street..... | 1895 | .038 | .073 | .021 | .068 | .812 | .225 | .409 | .189 | .314 | .298 |
| Salem street..... | Endicott street, across Prince street..... | 1901 | ..... | ..... | ..... | ..... | * | .181 | .045 | .145 | .304 | .408 |
| Shawmut avenue..... | 132 feet south of Castle street, across Cherry street. | 1898 | .150 | .198 | .194 | .325 | .325 | .504 | .114 | .214 | † | .002 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Shoghton street..... | At Albany street (crossing)..... | 1897 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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South Boston.

| | | | | | | | | |
|--|------|---------|---------|---------|---------|---------|---------|---------|
| Athens street..... | 1895 | \$0.000 | \$0.073 | | \$0.102 | \$0.031 | \$0.056 | |
| B street to C street..... | 1892 | .010 | .064 | | .059 | | .121 | |
| C street to D street..... | 1901 | ..... | ..... | ..... | * | ..... | .226 | ..... |
| C street to E street..... | 1901 | ..... | ..... | ..... | * | ..... | .115 | \$0.036 |
| Front of Lincoln School..... | 1897 | .048 | \$0.062 | \$0.071 | * | .032 | .011 | .063 |
| B street to D street..... | 1901 | ..... | ..... | ..... | \$0.004 | .111 | .012 | .048 |
| East Sixth street to East Eighth street, | 1893 | .103 | .066 | .094 | .215 | .050 | .443 | .130 |
| B street to D street..... | 1901 | ..... | ..... | ..... | * | .193 | .047 | .033 |
| C street to D street..... | 1901 | ..... | ..... | ..... | * | .193 | .008 | ..... |
| From 196 feet east of easterly line of Dorchester avenue to A street. | 1892 | .200 | .274 | .271 | .352 | .360 | .271 | .559 |
| Gardner place to 150 feet easterly.... | 1893 | .246 | .440 | .298 | .459 | .306 | .221 | .352 |
| 150 feet west of F street to 207 feet east of F street. | 1897 | .023 | .133 | .049 | .143 | .117 | .069 | .145 |
| 207 feet east of F street to 28 feet west of Dorchester street. | 1893 | .029 | .037 | .035 | .064 | .061 | .062 | .021 |
| West Broadway..... | | | | | | | | .319 |

Cost of Sicilian Rock Asphalt Repairs, 1907-16.— Concluded.

Roxbury.

| STREETS. | LIMITS. | Year Laid. | 1907. | 1908. | 1909. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
|------------------------|--|---------------|---------|---------|---------|---------|---------|-------|---------|---------|---------|---------|
| Columbus avenue..... | Terry street to 61 feet north of Station street. | 1896 | † | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Dudley street..... | East side of Dunmore street to Magazine street. | 1902 | ..... | ..... | ..... | ..... | ..... | * | \$0.091 | \$0.114 | ..... | \$0.138 |
| Huntington avenue..... | Massachusetts avenue to Gainsborough street. | 1896 | \$0.013 | \$0.038 | \$0.171 | \$0.015 | \$0.053 | ..... | .012 | .033 | \$0.020 | 0.117 |

East Boston.

| | | | | | | | | | | | | |
|----------------------|-------------------------------------|------|-------|-------|-------|---|---------|-------|---------|-------|-------|---------|
| Meridian street..... | Trenton street to Eutaw street..... | 1900 | | | | * | \$0.243 | | \$0.169 | | | \$0.652 |
|----------------------|-------------------------------------|------|-------|-------|-------|---|---------|-------|---------|-------|-------|---------|

Charlestown.

| | | | | | | | | | | | | |
|----------------------|---|------|-------|-------|-------|-------|---|---------|---------|---------|---------|---------|
| Lawrence street..... | East side of Lawrence avenue, across Miller street. | 1901 | ..... | ..... | ..... | ..... | * | ..... | \$0.036 | \$0.031 | ..... | \$0.014 |
| Miller street..... | Main street to Lawrence street..... | 1901 | ..... | ..... | ..... | ..... | * | ..... | .231 | .027 | ..... | .032 |
| Warren street..... | Winthrop street, across Soley street... | 1901 | ..... | ..... | ..... | ..... | * | \$0.293 | .543 | .517 | \$0.663 | 0.626 |

Cost of Seyssel Rock Asphalt Repairs, 1907-16.

| Street. | Limite. | Year Laid. | 1907. | 1908. | 1909. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
|-----------------------|--|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Genesee street..... | Harrison avenue to Albany street.... | 1899 | \$0.016 | \$0.010 | \$0.084 | \$0.069 | \$0.040 | \$0.127 | \$0.042 | \$0.205 | \$0.004 | \$0.048 |
| Mason street..... | 444 feet south of West street to Avery street. | 1899 | .087 | .086 | † .025 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Mason street..... | 545 feet south of West street to 553 feet south of West street. | 1899 | ..... | ..... | ..... | ..... | ..... | ..... | .127 | .049 | ..... | .140 |
| Milton street..... | Brighton street to Spring street..... | 1899 | ..... | ..... | ..... | .026 | .052 | ..... | .058 | ..... | .099 | ..... |
| Oswego street..... | Harrison avenue to Albany street.... | 1899 | .099 | .022 | .032 | .041 | .038 | .075 | .010 | .082 | .025 | .050 |
| Paul street..... | Emerald street to Village street..... | 1897-99 | .023 | .077 | ..... | .056 | .299 | .042 | .017 | .081 | ..... | .198 |
| Paul street..... | Village street to Tremont street..... | 1897-99 | .028 | .084 | .040 | .138 | .175 | .065 | .069 | .083 | ..... | .240 |
| Pelham street..... | Washington street to Shawmut ave.... | 1897 | .013 | .042 | .078 | .027 | .028 | .193 | .105 | .290 | .145 | ..... |
| Waterford street..... | Washington street to Shawmut ave.... | 1897 | .085 | .093 | .047 | .131 | .184 | .168 | ..... | .190 | ..... | ..... |

* Guaranty expired.

† Repaved.

‡ Part repaved.

§ Repaved with wood block.

Cost of Acme Asphalt Repairs, 1914-16.

| Street. | Limita. | Year Laid. | 1914. | 1915. | 1916. |
|---------------------------|---|---------------|----------|----------|----------|
| Court square..... | East roadway — 20 feet north of Williams court to south of Williams court; south roadway from east roadway to west roadway, and west roadway from 291 feet south of Court street to 286 feet south of Court st. | 1913 | ..... | ..... | \$0 .022 |
| Massachusetts avenue..... | Tremont street to Columbus avenue..... | 1910 | ..... | ..... | .003 |
| Massachusetts avenue..... | Boylston street to Boston & Albany Railroad Bridge..... | 1909 | \$0 .034 | \$0 .633 | .105 |
| Massachusetts avenue..... | Shawmut avenue to Tremont street..... | 1910 | ..... | ..... | .004 |
| Massachusetts avenue..... | Washington street to Shawmut avenue..... | 1910 | ..... | ..... | .006 |
| Wheeler street..... | Shawmut avenue to Cornsng street..... | 1909 | ..... | ..... | .022 |

Summary of Table Showing the Cost of Asphalt Repairs, 1907-16.

| YEAR. | Contract Awarded to | CONTRACT PRICES. | | | AREAS AND COST. | | | |
|-----------|------------------------------------|---|--------------------------------|------------------------------|---|---------------------------------------|---------------------|----------------------------|
| | | Asphalt Surface and Binder per Square Yard. | Concrete Base per Square Yard. | Extra Binder per Cubic Yard. | Total Area Not Under Groutage Maintained by the City. Square Yards. | Cost of Maintenance for Current Year. | Unit Area Repaired. | Unit Cost per Square Yard. |
| 1907..... | Barber Asphalt Paving Company..... | \$2 50 | \$0 75 | \$0 00 | 140,821 | \$10,808 44 | .0305 | \$0 077 |
| 1908..... | Warren Brothers Company..... | 1 73 | 75 | 7 50 | 135,676 | 15,793 80 | .0667 | 116 |
| 1909..... | Jones & Mehan..... | 1 62 | 75 | 8 00 | 131,688 | 9,945 24 | .0463 | 076 |
| 1910..... | Barber Asphalt Paving Company..... | 1 49 | 1 00 | 8 00 | 139,829 | 15,632 74 | .0742 | 112 |
| 1911..... | Warren Brothers Company..... | 1 34 | 1 00 | 9 00 | 218,007 | 27,504 52 | .0930 | 125 |
| 1912..... | Warren Brothers Company..... | 1 24 | 1 10 | 11 00 | 222,848 | 26,397 97 | .0933 | 118 |
| 1913..... | Warren Brothers Company..... | 1 37 | 1 15 | 11 00 | 226,837 | 22,699 01 | .0729 | 101 |
| 1914..... | Central Construction Company..... | 1 19 | 1 00 | 11 00 | 237,204 | 23,384 52 | .0821 | 099 |
| 1915..... | Central Construction Company..... | 1 06 | 1 00 | 11 00 | 238,545 | 40,633 82 | .1556 | 170 |
| 1916..... | Central Construction Company..... | 1 16 | 2 50 | 4 00 | 280,268 | 25,941 25 | .0796 | 093 |

All contracts advertised and awarded to lowest bidder except in 1907.

Cost of Bitulithic Repairs, 1907-16.

| STREETS. | Limits. | Year Laid. | 1907. | 1908. | 1909. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
|---------------------------|---|---------------|-------|-------|-------|-------|-------|-------|----------|---------|---------|---------|
| Belvidere street..... | West Newton street to Massachusetts avenue. | 1903 | ..... | ..... | ..... | ..... | ..... | ..... | \$0.078* | \$0.034 | \$0.768 | ..... |
| Berkley street..... | Boylston street to Beacon street..... | 1903 | ..... | ..... | ..... | ..... | ..... | ..... | *.005 | .001 | .005 | ..... |
| Bowdoin street..... | Ashburton place to Cambridge street, | 1902 | ..... | ..... | ..... | ..... | ..... | * | .184 | .075 | .219 | ..... |
| Clarendon street..... | Boylston street to Beacon street..... | 1905 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | *.011 | ..... |
| Dartmouth street..... | Newbury street to Beacon street..... | 1903 | ..... | ..... | ..... | ..... | ..... | ..... | * | .001 | .049 | ..... |
| Emerald street..... | Castle street to Dover street..... | 1904 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | *.004 | .005 | ..... |
| Gainsborough street..... | Huntington avenue to N. Y., N. H. & H. R. R. | 1903 | ..... | ..... | ..... | ..... | ..... | ..... | * | .032 | ..... | ..... |
| Hancock street..... | Mt. Vernon street to Cambridge street, | 1902 | ..... | ..... | ..... | ..... | ..... | * | .009 | .027 | .167 | ..... |
| Harrison avenue..... | East Springfield street to Northamp- ton street. | 1905 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | * | \$ .279 |
| Massachusetts avenue..... | Columbus avenue to Huntington ave- nue. | 1903 | ..... | ..... | ..... | ..... | ..... | ..... | *.094 | .092 | .834 | .051 |
| Massachusetts avenue..... | Beacon street to Harvard Bridge..... | 1902 | ..... | ..... | ..... | ..... | ..... | * | .300 | .127 | .843 | .017 |
| Maverick street..... | London street to Havre street..... | 1903 | ..... | ..... | ..... | ..... | ..... | ..... | *.013 | ..... | ..... | .023 |
| Oneida street..... | Harrison avenue to Albany street..... | 1903 | ..... | ..... | ..... | ..... | ..... | ..... | * | .005 | .038 | .127 |
| Roxbury street..... | Shawmut avenue to Kent street..... | 1904 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | *.005 | ..... | .443 |
| Smith street..... | St. Alphonsus street to Phillips street. | 1904 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | *.040 | ..... | ..... |

| | 1902 | | * | .042 | .018 |
|-------------------------|--|--|---|--------|-----------|
| Tremont street..... | St. Alphonsus street to Phillips street, | | | | |
| West Newton street..... | Tremont street to Columbus avenue, | | | * .003 | .100 |
| West Newton street..... | Columbus avenue to Huntington ave- nue. | | | * .014 | .062 .068 |
| West Newton street..... | Huntington avenue, across Belvidere street. | | | * .014 | .046 .653 |

* Guaranty expired in this year.

Summary of Table Showing Cost of Bitulithic Repairs, 1913-16.

| YEAR. | Contract Awarded to | CONTRACT PRICES. | | | | | AREAS AND COST. | | | |
|-----------|----------------------------|--|---|--------------------------------|------------------------------|-----------------------------|---|---------------------------------------|---------------------|----------------------------|
| | | Bitulithic Full Depth Patches per Square Yard. | Bitulithic Surface Patches per Square Yard. | Concrete Base per Square Yard. | Extra Binder per Cubic Yard. | Flush Coat per Square Yard. | Total Area Not Under Guaranty Maintained by the City. Square Yards. | Cost of Maintenance for Current Year. | Unit Area Repaired. | Unit Cost per Square Yard. |
| 1913..... | Warren Brothers Company * | \$1 37 | † \$0 80 | \$1 15 | \$11 00 | ..... | 40,888 | \$1,625 60 | .0309 | \$0.040 |
| 1914..... | Central Construction Co.*. | 1 09 | 52 | 1 00 | 11 00 | † \$0 07 | 62,315 | 1,417 89 | .0631 | .023 |
| 1915..... | Central Construction Co.*. | 1 06 | 50 | 1 00 | 11 00 | † 07 | 83,473 | 10,396 54 | .1685 | .125 |
| 1916..... | Central Construction Co.*. | 1 11 | 50 | 2 50 | 4 90 | ..... | 98,298 | 1,666 65 | .0129 | .018 |

* Advertised and awarded to lowest bidder.

† By agreement.

LIST OF STREETS HAVING A SMOOTH PAVEMENT.

| Streets. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|------------------------------------|--|--------------------|---------------------------|---------------|----------------------|
| Academy Hill road (Brighton)..... | At Washington street. Bitulithic. Laid by Warren Brothers Company... | 3 | 17 | 1913 | Oct. 24, 1918. |
| Acton street (city proper)..... | 10 feet west of Washington street to 6 feet east of Bradford street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 243 | 329 | 1896 | |
| Acton street (city proper)..... | 6 feet east of Bradford street to Bradford street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 6 | 8 | 1897 | |
| Adams street (Roxbury)..... | East side of Eustis street. Bitulithic. Laid by John F. Beatty..... | 2 | 8 | 1914 | Sept. 4, 1919. |
| Adams street (Roxbury)..... | At Dudley street. Brick block. Laid by James Doherty..... | 7 | 20 | 1910 | |
| Albany street (city proper)..... | 82 feet north of Broadway to 27 feet north of Broadway. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 55 | 204 | 1899 | |
| Albany street (city proper)..... | 27 feet north of Broadway to 13 feet north of the south side of Way street. Wood block. Laid by New York, New Haven & Hartford Railroad Company. | 55 | 204 | 1913 | |
| Albany street (city proper)..... | 7 feet north of Stoughton street to 17 feet south of East Concord street. Bitulithic. Laid by Warren Brothers Company. Laid on existing base. | 309 | 1,354 | 1905 | |
| Albany street (city proper)..... | 17 feet south of East Concord street to 225 feet north of Massachusetts avenue. Trinidad asphalt. Laid by the Barber Asphalt Paving Company. | 446 | 2,676 | 1884 | |
| Albany street (city proper)..... | 225 feet north of Massachusetts avenue to Massachusetts avenue. Bitu- lithic. Laid by Warren Brothers Company. | 225 | 1,260 | 1905 | |
| Albany street (Roxbury)..... | 44 feet south of Hampden street to Eustis street. Bitulithic. Laid by Warren Brothers Company. | 1,613 | 4,900 | 1907 | Aug. 3, 1917. |
| Algonquin street (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 3 | 11 | 1913 | Oct. 21, 1918. |
| Allen street (city proper)..... | Charles street to 2 feet east of Charles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 2 | 6 | 1909 | |

List of Streets Having a Smooth Pavement — Continued.

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|-------------------------------------|---|--------------------|---------------------------|---------------|--------------------------------|
| Allen street (city proper) | 2 feet east of Charles street to Chambers street. Bitulithic. Laid by Warren Brothers Company. | 1,295 | 3,550 | 1905 | |
| Andrews street (city proper) | East Dedham street to East Canton street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 201 | 290 | 1899 | |
| Appleton street (city proper) | 4 feet north of Berkeley street to Berkeley street. Bitulithic. Laid by Warren Brothers Company. | 4 | 18 | 1906 | |
| Appleton street (city proper) | Berkeley street to 4 feet south of Berkeley street. Bitulithic. Laid by Warren Brothers Company. | 4 | 18 | 1906 | |
| Appleton street (city proper) | 4 feet south of Berkeley street to 3 feet north of Clarendon street. Acme asphalt (macadam base). Laid by Warren Brothers Company. | 564 { | 2,180 314 | 1916 1916 | Nov. 5, 1921. Nov. 5, 1921. |
| Appleton street (city proper) | Brick block gutters. Laid by Warren Brothers Company. | 3 | 15 | 1914 | Sept. 25, 1919. |
| Appleton street (city proper) | 3 feet north of Clarendon street to Clarendon street. Bitulithic. Laid by Warren Brothers Company. | 3 | 14 | 1914 | Sept. 25, 1919. |
| Appleton street (city proper) | Clarendon street to 3 feet south of Clarendon street. Bitulithic. Laid by Warren Brothers Company. | 3 | 14 | 1914 | Sept. 25, 1919. |
| Appleton street (city proper) | 3 feet south of Clarendon street to 8 feet north of Dartmouth street. Acme asphalt (macadam base). Laid by Warren Brothers Company. | 557 { | 2,151 310 | 1916 1916 | Nov. 5, 1921. Nov. 5, 1921. |
| Appleton street (city proper) | Brick block. Laid by Warren Brothers Company. | 293 { | 1,140 163 | 1916 1916 | Nov. 5, 1921. Nov. 5, 1921. |
| Appleton street (city proper) | 8 feet south of Dartmouth street to 91 feet north of West Canton street. Acme asphalt (macadam base). Laid by Warren Brothers Company. | 177 | 1,163 | 1912 | Aug. 2, 1917. |
| Appleton street (city proper) | 91 feet north of West Canton street to 10 feet north of Columbus avenue. Bitulithic. Laid by Fred S. & A. D. Gore Corporation. | 10 | 95 | 1906-07 | |
| Appleton street (city proper) | 10 feet north of Columbus avenue to Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | | | | |

| | | | | | |
|--------------------------------------|--|-------|-------|------|----------------|
| Arch street (city proper) | Milk street to Franklin street. Residual asphalt. Laid by Central Construction Company. | 416 | 1,203 | 1915 | |
| Arch street (city proper) | 9 feet south of Franklin street to 12 feet north of Summer street. Residual asphalt. Laid by Central Construction Company. | 382 | 1,303 | 1915 | |
| Arch street (city proper) | 12 feet north of Summer street to Summer street. Wood block. Laid by Northern Construction Company. | 12 | 63 | 1915 | Aug. 16, 1920. |
| Arch street (city proper) | Near Summer street. Trinidad asphalt. Laid by Northern Construction Company. | ..... | 150 | 1915 | July 28, 1920. |
| Ardent street (West Roxbury) | Collberg avenue to Belgrade avenue. Astec asphalt. Laid by Central Construction Company. | 280 | 840 | 1916 | Aug. 16, 1921. |
| Arlington street (city proper) | 13 feet south of Boylston street to Boylston street. Wood block. Laid by Clarke & Gore. | 13 | 60 | 1915 | Oct. 9, 1920. |
| Arlington street (city proper) | Boylston street to 18 feet north of Boylston street. Wood block. Laid by Clark & Gore. | 18 | 100 | 1915 | Oct. 9, 1920. |
| Arlington street (city proper) | 18 feet north of Boylston street to Beacon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 1,300 | 7,251 | 1901 | |
| Ash street (city proper) | Bennet street to Nassau street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 226 | 440 | 1905 | |
| Ash street (city proper) | North side of Nassau street to 6 feet north of Oak street. Acme asphalt. Laid by Warren Brothers Company. | 216 | 379 | 1909 | |
| Ashburton place (city proper) | Somerset street to 55 feet east of Bowdoin street. Bitulithic. Laid by Warren Brothers Company. | 278 | 665 | 1904 | |
| Ashburton place (city proper) | 55 feet east of Bowdoin street to Bowdoin street. Bitulithic. Laid by Warren Brothers Company. | 48 | 111 | 1911 | |
| Abby street (Brighton) | At Commonwealth avenue. Wood block. Laid by Clark & Gore. | 19 | 75 | 1915 | Sept. 2, 1920. |
| Aspinwall road (Dorchester) | Talbot avenue to 22 feet east of Talbot avenue. Brick block. Laid by James Doherty. | 22 | 98 | 1911 | |
| Aspinwall road (Dorchester) | 22 feet east of Talbot avenue to 29 feet east of Talbot avenue. Brick crosswalk. | 7 | 37 | 1907 | |
| Aspinwall road (Dorchester) | At Washington street. Wood block. Laid by William J. Barry. | 10 | 56 | 1913 | Oct. 21, 1918. |

List of Streets Having a Smooth Pavement — Continued.

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|-------------------------------------|---|--------------------|---------------------------|---------------|----------------------|
| Astor street (Roxbury)..... | At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 4 | 13 | 1901 | |
| Athens street (South Boston)..... | West Second street to A street. Sicilian rock asphalt; bituminous concrete base. Laid by Boston Asphalt Company. | 614 | 902 | 1895 | |
| Athens street (South Boston)..... | B street to C street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 503 | 726 | 1892 | |
| Athens street (South Boston)..... | C street to D street. Sicilian rock asphalt. Laid by Jones & Meehan..... | 508 | 734 | 1901 | |
| Auburn street (city proper)..... | 8 feet south of Leverett street to Chambers street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 247 | 556 | 1911 | |
| Auburn street (city proper)..... | Chambers street to Poplar street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 367 | 764 | 1911 | |
| Auburn street (Roxbury)..... | Ruggles street to 7 feet south of Ruggles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 7 | 20 | 1907 | Aug. 23, 1917. |
| Auburn street (Roxbury)..... | 7 feet north of Vernon street to Vernon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 7 | 20 | 1907 | Nov. 30, 1917. |
| Austin street (Charlestown)..... | 8 feet west of Seminary place to 5 feet east of Lawrence street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 143 | 413 | 1891 | |
| Avenue Louis Pasteur (Roxbury)..... | 121 feet north of Longwood avenue to Longwood avenue. Brick block. Laid by James Doherty. | 121 | 1,244 | 1910 | |
| Avery street (city proper)..... | Washington street to 10 feet west of Washington street. Wood block. Laid by Coleman Brothers. | 10 | 30 | 1914 | Nov. 6, 1919. |
| Avery street (city proper)..... | 10 feet west of Washington street to Tremont street. Bitulithic. Laid by Coleman Brothers. | 415 | 1,200 | 1914 | Nov. 6, 1919. |
| Avon street (city proper)..... | Washington street to 9 feet east of Washington street. Wood block. Laid by United States Wood Preserving Company. | 9 | 20 | 1906 | |

| | | | | |
|--|---|-------|--------|---------|
| Avon street (city proper)..... | 9 feet east of Washington street to Chauncy street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 428 | 1,061 | 1901 |
| Barton court (city proper)..... | Barton street to Brighton street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 134 | 182 | 1904 |
| Barton street (city proper)..... | Leverett street to Chambers street and Chambers street to 5 feet north of Milton street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 380 | 645 | 1895 |
| Barton street (city proper)..... | 5 feet north of Milton street to Milton street. Sycamel rock asphalt. Laid by Jones & Meehan. | 5 | 8 | 1899 |
| Batterymarch street (city proper)..... | 93 feet west of Broad street to 7 feet east of Milk street. American rock asphalt. Laid by Jones & Meehan. | 206 | 659 | 1909 |
| Batterymarch street (city proper)..... | 7 feet east of Milk street to Milk street. Wood block. Laid by James Doherty. | 7 | 21 | 1911 |
| Batterymarch street (city proper)..... | Milk street to 7 feet west of Milk street. Wood block. Laid by James Doherty. | 7 | 21 | 1911 |
| Batterymarch street (city proper)..... | 7 feet west of Milk street to Liberty square. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 143 | 445 | 1896 |
| Beacon street (city proper)..... | Charles street to 6 feet west of Arlington street (south side). Trinidad asphalt. Laid by Barber Asphalt Paving Company. | ..... | 2,108 | 1901 |
| Beacon street (city proper)..... | Charles street to east side of Brimmer street (north side). Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 495 | 2,228 | 1891 |
| Beacon street (city proper)..... | Easterly side of Brimmer street to 6 feet west of Arlington street (north side). American rock asphalt. Laid by Jones & Meehan. | 364 | 1,519 | 1908 |
| Beacon street (city proper)..... | 6 feet west of Arlington street to 5 feet east of Dartmouth street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 1,851 | 9,906 | 1900-01 |
| Beacon street (city proper)..... | 5 feet east of Dartmouth street to easterly side of Hereford street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 2,285 | 12,134 | 1909 |
| Beacon street (city proper)..... | Easterly side of Hereford street to Massachusetts avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 703 | 3,754 | 1907 |
| Beacon street (city proper and Roxbury)..... | Massachusetts avenue to 10 feet east of Raleigh street. Wood block. Laid by Central Construction Company. | ..... | 2,229 | 1913 |

July 3, 1918.

Sept. 16, 1917.

List of Streets Having a Smooth Pavement — *Continued.*

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|---|--|--------------------|---------------------------|---------------|----------------------|
| Beacon street (city proper and Roxbury). | Massachusetts avenue to 10 feet east of Raleigh street. Wood block. Laid by United States Wood Preserving Company. | 1,517 | 5,863 | 1901 | |
| Beacon street (Brighton) | 1,011 feet west of east street line of Reservoir lane to Newton line. Concrete road. Laid by city forces. | 2,308 | 6,371 | 1916 | |
| Belvidere street (city proper and Roxbury). | West Newton street to 3 feet east of Massachusetts avenue. Bitulithic. Laid by Warren Brothers Company. | 1,324 | 4,025 | 1902-03 | |
| Belvidere street (Roxbury) | 3 feet east of Massachusetts avenue to Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 3 | 12 | 1901 | |
| Bennet street (city proper) | East side of Ash street to Harrison avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 248 | 469 | 1905 | |
| Bennington street (East Boston) | Bridges over Boston & Albany Railroad. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 60 | 507 | 1906 | |
| Benton street (Roxbury) | At Columbus avenue. Bermudes asphalt. Laid by Boston Asphalt Company. | 27 | 69 | 1903-07 | |
| Berkeley street (city proper) | Tremont street to Columbus avenue. Bitulithic. Laid by Warren Brothers Company. | 1,195 | 4,663 | 1906 | |
| Berkeley street (city proper) | 156 feet south of Boylston street to 38 feet south of Boylston street. (East side.) Trinidad asphalt. Laid by Barber Asphalt Paving Company. (West side.) Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 118 { | 248 { 200 | 1906 1902 | |
| Berkeley street (city proper) | 38 feet south of Boylston street to 15 feet south of Boylston street. Trinidad asphalt. Laid by Coleman Brothers. | 23 | 75 | 1914 | Nov. 3, 1919. |
| Berkeley street (city proper) | 15 feet south of Boylston street to Boylston street. Wood block. Laid by Coleman Brothers. | 15 | 92 | 1914 | Nov. 3, 1919. |
| Berkeley street (city proper) | Boylston street to 15 feet north of Boylston street. Wood block. Laid by Coleman Brothers. | 15 | 66 | 1914 | Nov. 3, 1919. |
| Berkeley street (city proper) | 15 feet north of Boylston street to 119 feet north of Boylston street. Bitulithic. Laid by Coleman Brothers in 1914; Warren Brothers in 1903. | 104 { | 430 { 32 | 1914 1903 | Nov. 3, 1919. |

| | | | | | |
|------------------------------------|---|-----|-------|---------|-----------------|
| Berkeley street (city proper)..... | 119 feet north of Boylston street to south street line of Commonwealth avenue. Bitulithic. Laid by Warren Brothers Company. | 448 | 1,992 | 1903 | |
| Berkeley street (city proper)..... | South street line of Commonwealth avenue to north street line of Commonwealth avenue. Bitulithic (macadam base). Laid by Warren Brothers Company. | 200 | 879 | 1916 | Nov. 22, 1921. |
| Berkeley street (city proper)..... | North street line of Commonwealth avenue to 3 feet south of Marlborough street. Bitulithic. Laid by Warren Brothers Company. | 262 | 1,164 | 1903 | |
| Berkeley street (city proper)..... | East side of Marlborough street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 5 | 25 | 1901 | |
| Berkeley street (city proper)..... | North side of Marlborough street to Beacon street. Bitulithic. Laid by Warren Brothers Company. | 262 | 1,164 | 1903 | |
| Bernard street (Dorchester)..... | At Talbot avenue (crosswalks). Brick block. Laid by James Doherty.... | 23 | 155 | 1911 | |
| Berwick park (city proper)..... | At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 9 | 34 | 1906-07 | |
| Bickford street (Roxbury)..... | At Heath street. Brick block. Laid by Field, Barker & Underwood, Inc.. | 8 | 23 | 1910 | |
| Binney street (Roxbury)..... | At Longwood avenue. Brick block. Laid by Field, Barker & Underwood, Inc. | 8 | 32 | 1910 | |
| Birch street (West Roxbury)..... | Penfield street to 6 feet east of Albano street. Bitulithic. Laid by A. H. Archer. | 346 | 898 | 1915 | Sept. 30, 1920. |
| Birch street (West Roxbury)..... | 6 feet west of Albano street to 416 feet west of Albano street. Bitulithic. Laid by A. H. Archer. | 410 | 1,048 | 1915 | Sept. 30, 1920. |
| Bird street (Dorchester)..... | At Hancock street. Brick block. Laid by Central Construction Company. | 10 | 29 | 1910-11 | |
| Blagden street (city proper)..... | Huntington avenue to Exeter street. Bitulithic. Laid by Fred S. & A. D. Gore Corporation. | 489 | 1,882 | 1912 | Aug. 17, 1917. |
| Blossom street (city proper)..... | At Parkman street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 1 | 3 | 1898 | |
| Blue Hill avenue (Roxbury)..... | At Dudley street. Brick block. Laid by James Doherty..... | 9 | 41 | 1910 | |
| Blue Hill avenue (Roxbury)..... | Dewey street to north side of Savin street. Bitulithic. Laid by Warren Brothers Company. | 598 | 1,528 | 1906 | |

List of Streets Having a Smooth Pavement — *Continued.*

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|------------------------------------|--|--------------------|---------------------------|-----------------|----------------------|
| Blue Hill avenue (Roxbury)..... | Brunswick street to north side of Devon street. Bituthic. Laid by Warren Brothers Company. | 199 | 509 | 1906 | |
| Bolton street (South Boston)..... | C street to D street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 501 | 724 | 1905 | |
| Bond street (city proper)..... | Hanson street to Milford street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 182 | 404 | 1895 | |
| Boston street (South Boston)..... | 4 feet north of Ralston street to New York, New Haven & Hartford Railroad Bridge. Wood block. Laid by National Safety Wood Preserving Company. | 193 | 531 | 1911 | |
| Bowdoin street (city proper)..... | At Tremont street. Wood block. Laid by Coleman Brothers..... | 13 | 28 | 1915 | June 20, 1920. |
| Bowdoin street (city proper)..... | Beacon street to north side of Ashburton place. Brick..... | 380 | 1,013 | 1902 | |
| Bowdoin street (city proper)..... | North side of Ashburton place to 17 feet south of Cambridge street. Bituthic. Laid by Warren Brothers Company. | 837 | 2,205 | 1902 | |
| Bowdoin street (Dorchester)..... | 96 feet west of Winter street to Hancock street. Brick block. Laid by Central Construction Company. | 310 | { 1,438 993 | 1910-11 1913 | Sept. 12, 1918. |
| Bowdoin street (Dorchester)..... | East side of Quincy street to 78 feet west of Mt. Ida road. Wood block. Laid by James Doherty. | 386 | 1,885 | 1909 | |
| Bowdoin street (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 14 | 100 | 1912 | Oct. 21, 1918. |
| Bowen street (South Boston)..... | C street to D street. Sicilian rock asphalt. Laid by Jones & Meehan..... | 509 | 735 | 1901 | |
| Bowen street (South Boston)..... | D street to E street. Sicilian rock asphalt. Laid by Jones & Meehan..... | 514 | 742 | 1901 | |
| Bowen street (South Boston)..... | E street to F street. Bituthic. Laid by Warren Brothers Company..... | 500 | 722 | 1903 | |
| Bowen street (South Boston)..... | At Dorchester street. Bituthic. Laid by Warren Brothers Company..... | 4 | 6 | 1905 | |
| Boylston street (city proper)..... | 9 feet west of Tremont street to the west street line of Boylston place. Wood block. Laid by Fred S. Gore. | 352 | 1,327 | 1915 | April 1, 1920. |

| | | | | | |
|--|---|-------|-------|------|----------------|
| Boylston street (city proper)..... | West street line of Boylston place to 89 feet east of Carver street. Wood block. Laid by United States Wood Preserving Company. | 155 | 569 | 1901 | |
| Boylston street (city proper)..... | 89 feet east of Carver street, across Arlington street. Wood block. Laid by Clark & Gore. | 1,192 | 8,883 | 1915 | Oct. 9, 1920. |
| Boylston street (city proper)..... | Arlington street, across Berkeley street. Wood block. Laid by Coleman Brothers. | 776 | 4,251 | 1914 | Nov. 3, 1919. |
| Boylston street (city proper)..... | Berkeley street, across Clarendon street. Wood block. Laid by Coleman Brothers. | 612 | 3,400 | 1914 | Nov. 3, 1919. |
| Boylston street (city proper)..... | At Huntington avenue. Bitulithic. Laid by Coleman Brothers..... | ..... | 68 | 1914 | Nov. 3, 1919. |
| Boylston street (city proper)..... | Clarendon street, across Dartmouth street. Wood block. Laid by Coleman Brothers. | 650 | 3,543 | 1914 | Nov. 3, 1919. |
| Boylston street (city proper)..... | Dartmouth street to east side of Exeter street. Wood block. Laid by Coleman Brothers. | 548 | 3,044 | 1914 | Nov. 3, 1919. |
| Boylston street (city proper)..... | At Exeter street (in tracks). Wood block. Laid by Coleman Brothers..... | ..... | 68 | 1914 | Nov. 3, 1919. |
| Boylston street (city proper)..... | East side of Exeter street to 107 feet west of Exeter street. Bitulithic. Laid by Coleman Brothers. | 144 | 417 | 1914 | Nov. 3, 1919. |
| Boylston street (city proper and Roxbury)..... | 107 feet west of Exeter street to 8 feet east of Hereford street. Bitulithic. Laid by Warren Brothers Company. | 1,501 | 5,481 | 1913 | Aug. 13, 1918. |
| Boylston street (Roxbury)..... | 14 feet west of St. Cecilia street to 5 feet east of Massachusetts avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 221 | 778 | 1904 | |
| Boylston street (Roxbury)..... | 5 feet east of Massachusetts avenue to Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 5 | 17 | 1901 | |
| Boylston street (Roxbury)..... | Massachusetts avenue to 3 feet west of Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 3 | 12 | 1901 | |
| Boylston street (Roxbury)..... | 3 feet west of Massachusetts avenue to westerly street line of Hemenway street. Bitulithic. Laid by Warren Brothers Company. | 387 | 1,384 | 1905 | |
| Bradford street (city proper)..... | Waltham street to Shawmut avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 583 | 1,233 | 1897 | |
| Bradlee street (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 3 | 11 | 1913 | Oct. 21, 1918. |

List of Streets Having a Smooth Pavement — *Continued.*

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|--|---|--------------------|---------------------------|---------------|----------------------|
| Brattle square (city proper)..... | 7 feet north of Brattle street to 6 feet south of Elm street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 268 | 683 | 1888 | |
| Brighton avenue (Brighton)..... | 8 feet east of Harvard avenue to 8 feet west of Harvard avenue. Bitulithic. Laid by Coleman Brothers. | 37 | 247 | 1914 | Aug. 7, 1919. |
| Brighton avenue (Brighton)..... | At Harvard avenue (street car tracks). Wood block. Laid by Coleman Brothers. | 6 | 89 | 1914 | Aug. 7, 1919. |
| Brighton street (city proper)..... | Between Leverett street and Poplar street (not including next item). Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 599 | 809 | 1892 | |
| Brighton street (city proper)..... | Between Leverett street and Chambers street. Acme asphalt. Laid by Warren Brothers Company. | ..... | 523 | 1908 | |
| Brighton street (city proper)..... | Poplar street to 7 feet north of Allen street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 233 | 488 | 1892 | |
| Brighton street (city proper)..... | 7 feet north of Allen street to Allen street. Bitulithic. Laid by Warren Brothers Company. | 7 | 27 | 1905 | |
| Brimmer street (city proper)..... | Beacon street to center of Byron street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 116 | 322 | 1895 | |
| Brimmer street (city proper)..... | Center of Byron street to Chestnut street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 180 | 536 | 1906 | |
| Brimmer street (city proper)..... | Chestnut street to Pinckney street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 791 | 2,442 | 1895 | |
| Brinsley street (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 5 | 26 | 1912 | Oct. 21, 1918. |
| Broadway (city proper and South Boston). | Drawbridge over Fort Point channel. Wood block. Laid by Boston Bridge Works. | 210 | 934 | 1914 | |
| Broadway (city proper)..... | Albany street to 105 feet west of Albany street. Wood block. Laid by New York, New Haven & Hartford Railroad Company. | 106 | 611 | 1913 | |

PUBLIC WORKS DEPARTMENT.

331

| | | June 20, 1920. |
|--|---|----------------|
| Bronfield street (city proper)..... | Wood block. At Tremont street. Laid by Coleman Brothers..... | 31 |
| Brooks street (Brighton)..... | Bridge over Boston & Albany Railroad (central roadway). Sicilian rock asphalt. Laid by Boston Asphalt Company. | 180 |
| Browning avenue (Dorchester)..... | Bernard street to Wales street. Bitulithic. Laid by H. J. McGuire..... | 2,384 |
| Brunswick street (Roxbury and Dorchester). | Blue Hill avenue to Normandy street. Asteco asphalt. Laid by Central Construction Company., | 638 |
| Buckingham street (city proper)..... | At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 4 |
| Bunker Hill street (Charlestown)..... | At Tufts street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 161 |
| Burke street (Roxbury)..... | At Columbus avenue. Bermudes asphalt. Laid by Boston Asphalt Company. | 66 |
| Burrong's street (West Roxbury)..... | At Centre street. Bitulithic. Laid by Warren Brothers Company..... | 2 |
| Cabot street (Roxbury)..... | 180 feet west of Tremont street to Ruggles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 1,236 |
| Cabot street (Roxbury)..... | Easterly side of Ruggles street to 7 feet east of Vernon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 716 |
| Cabot street (Roxbury)..... | 7 feet east of Vernon street to 7 feet north of Linden Park street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 477 |
| Cabot street (Roxbury)..... | 7 feet north of Linden Park street to Linden Park street. Brick block. Laid by J. E. Burns & Co. | 7 |
| Callender street (Dorchester)..... | 51 feet west of Carlos street to 17 feet east of Blue Hill avenue, across Don street. Trinidad asphalt. Laid by D. M. Biggs & Co. | 1,241 |
| Cambridge street (Brighton)..... | 224 feet west of Elko street to Washington street. Bitulithic. Laid by Warren Brothers Company. | 169 |
| Cambridge street (Brighton)..... | 224 feet west of Elko street to Washington street. (Brows to street car rails.) Wood block. Laid by Warren Brothers Company. | 38 |
| Camden street (city proper)..... | Both sides of Columbus avenue (crosswalks). Bermudes asphalt. Laid by Boston Asphalt Company. | 68 |

List of Streets Having a Smooth Pavement—Continued.

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|-------------------------------------|---|--------------------|---------------------------|---------------|----------------------------------|
| Capen street (Dorchester)..... | At Norfolk street. Bitulithic. Laid by James Doherty..... | 8 | 25 | 1914 | July 11, 1919. |
| Carleton street (city proper)..... | At West Newton street. Bitulithic. Laid by Warren Brothers Company.. | 1 | 2 | 1903 | |
| Carolina avenue (West Roxbury)..... | At South street. Bitulithic. Laid by Warren Brothers Company..... | 1 | 3 | 1913 | Nov. 25, 1918. |
| Carver street (city proper)..... | Boylston street to 12 feet south of Boylston street. Wood block. Laid by Clark & Gore. | 12 | 27 | 1915 | Oct. 9, 1920. |
| Carver street (city proper)..... | 14 feet north of Pleasant street to Pleasant street. Wood block. Laid by Coleman Brothers. | 14 | 63 | 1913 | Dec. 13, 1918. |
| Castlegate road (Dorchester)..... | Normandy street to Blue Hill avenue, Roman road. Laid by Roman Road Company. | 433 | 1,250 | 1915 | Aug. 20, 1920. |
| Castle square (city proper)..... | Bridge over New York, New Haven & Hartford Railroad. Brick (in street car tracks). Laid by Boston Elevated Railway Company.. | 100 { | 112 1,366 | 1901 1899 | |
| Casenove street (city proper)..... | Trinidad asphalt. Laid by Barber Asphalt Paving Company..... | 45 | 134 | 1899 | |
| Casenove street (city proper)..... | Columbus avenue to 45 feet southerly; also the intersection of Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | | | | |
| Casenove street (city proper)..... | At Chandler street. Acme asphalt (macadam base). Laid by Warren Brothers Company..... | 3 { | 5 2 | 1916 1916 | Oct. 28, 1921. Oct. 28, 1921. |
| Cedric street (Roxbury)..... | Brick block gutters. Laid by Warren Brothers Company..... | 610 | 1,356 | 1916 | Nov. 11, 1921. |
| Central street (city proper)..... | Magazine street to Langdon street. Astec asphalt. Laid by Central Construction Company. | 308 | 836 | 1911 | |
| Centre street (Dorchester)..... | Broad street to Kilby street. Acme asphalt. Laid by Warren Brothers Company. | 70 | 255 | 1913 | Oct. 21, 1918. |
| Centre street (West Roxbury)..... | 70 feet east of Washington street to Washington street. Wood block. Laid by William J. Barry. | | | | |
| | Green street to 18 feet west of Elliot street. Bitulithic. Laid by Warren Brothers Company..... | 1,370 { | 6,260 283 | 1913 1913 | Nov. 25, 1918. Nov. 25, 1918. |
| | Wood block. (Brows to street car rails.) Laid by Warren Brothers Com- pany. | | | | |

| | | 1916 | Nov. 27, 1921. |
|-------------------------------------|--|-------|----------------|
| Centrevale park (Dorchester) | Bourneside street to Upland avenue. Astec asphalt. Laid by Central Construction Company. | 515 | 2,219 |
| Chambers street (city proper) | Green street, across Poplar street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 460 | 1,022 |
| Chambers street (city proper) | Brighton street to 6 feet west of Auburn street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 153 | 337 |
| Chambers street (city proper) | 6 feet west of Auburn street to 8 feet east of Charles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 112 | 249 |
| Chandler street (city proper) | 9 feet south of Castle square to 3 feet north of Berkeley street. Wood block. Laid by Fred S. & A. D. Gore Corporation. | 504 | 2,216 |
| Chandler street (city proper) | 3 feet north of Berkeley street to Berkeley street. Bitulithic. Laid by Warren Brothers Company. | 3 | 13 |
| Chandler street (city proper) | Berkeley street to 3 feet south of Berkeley street. Bitulithic. Laid by Warren Brothers Company. | 3 | 17 |
| Chandler street (city proper) | 3 feet south of Berkeley street to 2 feet north of Clarendon street. Acme asphalt (macadam base). Laid by Warren Brothers Company. | 566 { | 2,211 |
| Chandler street (city proper) | Brick block gutters. Laid by Warren Brothers Company. | } | 296 |
| Chandler street (city proper) | Clarendon street to 9 feet east of Columbus avenue. Acme asphalt (macadam base). Laid by Warren Brothers Company. | 548 { | 2,155 |
| Chandler street (city proper) | Brick block gutters. Laid by Warren Brothers Company. | } | 290 |
| Chandler street (city proper) | 2 feet north of Clarendon street to Clarendon street. Bitulithic. Laid by Warren Brothers Company. | 2 | 8 |
| Chandler street (city proper) | 9 feet east of Columbus avenue to Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 9 | 44 |
| Charles street (city proper) | At Boylston street. Wood block. Laid by Clark & Gore. | 32 | 1915 |
| Charles street (city proper) | Southerly side of Fruit street, across Allen street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 709 { | 1909 |
| Charles street (city proper) | Standard asphalt. Laid by Central Construction Company. | } | 960 |
| Charles street (Dorchester) | East street line of Ditson street to Geneva avenue. Concrete road. Laid by city forces. | 494 | 1,327 |

List of Streets Having a Smooth Pavement — *Continued.*

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|---------------------------------------|--|--------------------|---------------------------|---------------|----------------------|
| Charter street (city proper)..... | 14 feet west of Hanover street, across Unity street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 306 | 615 | 1894 | |
| Charter street (city proper)..... | Hanover street to 14 feet west of Hanover street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 14 | 50 | 1898 | |
| Chase street (Dorchester)..... | East Cottage street to Willis street. Trinidad asphalt. Laid by Central Construction Company. | 307 | 856 | 1915 | July 15, 1920. |
| Chauncy street (city proper)..... | Summer street to 6 feet south of Summer street. Wood block. Laid by Northern Construction Company. | 6 | 29 | 1915 | Aug. 16, 1920. |
| Chelsea Bridge South (Charlestown)... | 252 feet north of south side of Scott's court to south side of draw. Brick block. Laid by Rendle & Stoddard. | 194 | 730 | 1914 | April 24, 1919. |
| Chelsea Bridge South (Charlestown)... | North side of draw to 140 feet north of north side of draw. Brick block. Laid by Rendle & Stoddard. | 140 | 810 | 1914 | April 24, 1919. |
| Chelsea Bridge North (Charlestown)... | South side draw to Chelsea line. Wood block. Laid by Boston Bridge Works, Inc. | 319 | 1,418 | 1913 | |
| Cherry street (city proper)..... | 7 feet west of Washington street to 8 feet east of Shawmut avenue. Trini- dad asphalt. Laid by Barber Asphalt Paving Company. | 319 | 567 | 1892 | |
| Cherry street (city proper)..... | 8 feet east of Shawmut avenue to Shawmut avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 8 | 14 | 1898 | |
| Chestnut street (city proper)..... | At Brimmer street. Trinidad asphalt. Laid by Central Construction Company. | 1 | 3 | 1915 | |
| Chestnut Hill avenue (Brighton)..... | At Washington street. Bitulithic. Laid by Warren Brothers Company.. | 4 | 20 | 1913 | Oct. 24, 1918. |
| Child street (West Roxbury)..... | At South street. Bitulithic. Laid by Warren Brothers Company..... | 3 | 11 | 1913 | Nov. 25, 1918. |
| Chilmark street (Brighton)..... | At Commonwealth avenue. Wood block. Laid by Clark & Gore..... | 19 | 76 | 1915 | Sept. 2, 1920. |
| Chipman street (Dorchester)..... | At Norfolk street. Bitulithic. Laid by James Doherty..... | 1 | 4 | 1913 | July 11, 1919. |

| | | | | | |
|-------------------------------------|---|-----|-------|------|-----------------|
| Church street (city proper)..... | Boylston street to 55 feet south of Boylston street. Wood block. Laid by Clark & Gore. | 55 | 193 | 1915 | Oct. 9, 1920. |
| Church street (city proper)..... | 55 feet south of Boylston street to 10 feet north of Providence street. Wood block. Laid by Coleman Brothers. | 100 | 292 | 1913 | Sept. 11, 1918. |
| Church street (city proper)..... | 7 feet south of Fayette street to 6 feet north of Malross street. Wood block. Laid by Fred E. & A. D. Gore Corporation. | 175 | 521 | 1911 | |
| Claremont park (city proper)..... | At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 9 | 34 | 1908 | |
| Clarendon street (city proper)..... | 11 feet north of Tremont street to 4 feet south of Warren avenue. Bitulithic. Laid by Warren Brothers Company. | 320 | 1,422 | 1914 | Sept. 25, 1919. |
| Clarendon street (city proper)..... | Each side of Warren avenue. Wood block. Laid by Boston Paving Company. | 8 | 40 | 1913 | Dec. 13, 1918. |
| Clarendon street (city proper)..... | 4 feet north of Warren avenue to 5 feet south of Columbus avenue. Bitulithic. Laid by Warren Brothers Company. | 855 | 3,806 | 1914 | Sept. 25, 1919. |
| Clarendon street (city proper)..... | 5 feet south of Columbus avenue to Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 5 | 24 | 1908 | |
| Clarendon street (city proper)..... | 15 feet south of Boylston street to Boylston street. Wood block. Laid by Coleman Brothers. | 15 | 60 | 1914 | Nov. 3, 1919. |
| Clarendon street (city proper)..... | Boylston street to 14 feet north of Boylston street. Wood block. Laid by Coleman Brothers. | 14 | 56 | 1914 | Nov. 3, 1919. |
| Clarendon street (city proper)..... | 14 feet north of Boylston street to 46 feet north of Boylston street. Bitulithic. Laid by Coleman Brothers. | 32 | 101 | 1914 | Nov. 3, 1919. |
| Clarendon street (city proper)..... | 46 feet north of Boylston street to south street line of Commonwealth avenue. Bitulithic. Laid by Warren Brothers Company. | 521 | 2,121 | 1905 | |
| Clarendon street (city proper)..... | South street line of Commonwealth avenue to north street line of Commonwealth avenue. Bitulithic (macadam base). Laid by Warren Brothers Company. | 200 | 730 | 1916 | Nov. 23, 1921. |
| Clarendon street (city proper)..... | North street line of Commonwealth avenue to Beacon street. Bitulithic. Laid by Warren Brothers Company. | 565 | 2,260 | 1905 | |
| Clark street (city proper)..... | 18 feet east of Hanover street to 8 feet west of North street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 293 | 556 | 1892 | |

List of Streets Having a Smooth Pavement—Continued.

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|--|--|--------------------|---------------------------|---------------|----------------------|
| Clark street (city proper)..... | Hanover street to 18 feet east of Hanover street. Sidilian rock asphalt. Laid by Boston Asphalt Company. | 18 | 35 | 1896 | |
| Claybourne street (Dorchester)..... | 187 feet south of Dakota street to Park street. Bitulithic. Laid by James Doherty. | 914 | 2,654 | 1915 | Sept. 10, 1920. |
| Cleveland place (city proper)..... | Snow Hill street to Margaret street. Fire brick..... | 253 | 355 | | |
| Cobb street (city proper)..... | 9 feet west of Washington street to 9 feet east of Shawmut avenue. Sidilian rock asphalt. Laid by Boston Asphalt Company. | 329 | 937 | 1897 | |
| Cobb street (city proper)..... | 9 feet east of Shawmut avenue to Shawmut avenue. Sidilian rock asphalt. Laid by Boston Asphalt Company. | 9 | 27 | 1893 | |
| Colonial avenue (Dorchester)..... | At Talbot avenue. Brick block. Laid by James Doherty..... | 16 | 87 | 1911 | |
| Columbia road (Dorchester)..... | Bridge over New York, New Haven & Hartford Railroad. Brick..... | 163 | 303 | 1903 | |
| Columbia road (Dorchester)..... | Bridge over Shoreham street. Brick..... | 59 | 131 | 1902 | |
| Columbia road (Dorchester)..... | At Hancock street. Brick block. Laid by Central Construction Company, ..... | ..... | 280 | 1911 | |
| Columbia road (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 20 | 66 | 1912 | Oct. 21, 1918. |
| Columbus avenue (city proper)..... | 134 feet south of Ferdinand street to Boston & Albany Railroad Bridge. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 913 | 3,570 | 1904 | |
| Columbus avenue (city proper)..... | Bridge over New York, New Haven & Hartford Railroad (in street car tracks). Brick. Laid by Boston Elevated Railway Company. | ..... | 149 | 1906 | |
| Columbus avenue (city proper)..... | See Cazenove street. | | | | |
| Columbus avenue (city proper)..... | Boston & Albany Railroad Bridge to northerly side of Camden street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 4,053 | 15,743 | 1906-07 | |
| Columbus avenue (city proper and Roslbury)..... | Northerly side of Camden street to 67 feet north of Station street. Ber- mudes asphalt. Laid by Boston Asphalt Company. | 3,846 | 15,579 | 1906-07 | |

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|--|--|-------|---------|------|-----------------|
| Columbus square (city proper)..... | Columbus avenue to 9 feet east of Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 9 | 46 | 1906 | |
| Columbus square (city proper)..... | 9 feet east of Columbus avenue to 4 feet east of Pembroke street. Bitulithic. Laid by Fred S. & A. D. Gore Corporation. | 235 | 1,774 | 1912 | Aug. 2, 1917. |
| Commonwealth avenue (city proper)... | Arlington street to 4 feet west of Arlington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 4 | 28 | 1901 | |
| Commonwealth avenue (city proper)... | 4 feet west of Arlington street to Berkeley street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 627 | 4,690 | 1916 | Nov. 22, 1921. |
| Commonwealth avenue (city proper)... | Berkeley street to Clarendon street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 590 | 4,340 | 1916 | Nov. 22, 1921. |
| Commonwealth avenue (city proper)... | Clarendon street to Dartmouth street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 575 | 4,015 | 1916 | Nov. 21, 1921. |
| Commonwealth avenue (city proper)... | Dartmouth street to Exeter street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 555 | 3,857 | 1916 | Nov. 21, 1921. |
| Commonwealth avenue (city proper and Roxbury). | Exeter street to 4 feet east of Massachusetts avenue. Bitulithic (macadam base). Laid by Warren Brothers Company. | 2,316 | 17,596 | 1916 | Sept. 11, 1921. |
| Commonwealth avenue..... | 4 feet east of Massachusetts avenue to Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 4 | 38 | 1901 | |
| Commonwealth avenue (Roxbury).... | Massachusetts avenue to 3 feet west of Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 3 | 29 | 1901 | |
| Commonwealth avenue (Roxbury).... | Charlestown West to street line of Beacon street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 908 { | 7,450 { | 1916 | Sept. 11, 1921. |
| Commonwealth avenue (Roxbury and Brighton). | Brick block gutters. Laid by Warren Brothers Company. | 693 } | 693 } | | |
| Commonwealth avenue (Brighton).... | Beacon street to Cottage Farm Bridge (north roadway). Wood block. Laid by Clark & Gore. | 3,784 | 19,600 | 1915 | Sept. 2, 1920. |
| Commonwealth avenue (Brighton).... | Cottage Farm Bridge over Boston & Albany Railroad. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 140 | 1,556 | 1896 | |
| Commonwealth avenue (Brighton).... | 297 feet east of Naples road to 136 feet west of Naples road. Endurite (macadam base). Laid by Warren Brothers Company. | 467 | 1,816 | 1912 | Sept. 14, 1917. |
| Concord square (city proper)..... | At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 9 | 41 | 1906 | |

List of Streets Having a Smooth Pavement—Continued.

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Quaranty Expires. |
|------------------------------------|---|--------------------|---------------------------|---------------|----------------------|
| Congress square (city proper)..... | Congress street, across Congress square. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 201 | 388 | 1900 | |
| Cooper street (city proper)..... | North Margin street to Endicott street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 163 | 504 | 1887 | |
| Cooper street (city proper)..... | East side of Endicott street to 10 feet east of Washington Street North. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 231 | 680 | 1908 | Sept. 16, 1918. |
| Corbet street (Dorchester)..... | At Norfolk street. Bitulithic. Laid by James Doherty..... | 46 | 184 | 1914 | July 11, 1919. |
| Corey street (Charlestown)..... | 124 feet north of Moulton street to Moulton street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 124 | 289 | 1887 | |
| Cornhill court (city proper)..... | At Washington street. Wood block. Laid by James Doherty..... | 9 | 8 | 1908 | Nov. 21, 1918. |
| Corning street (city proper)..... | Washington street to 8 feet east of Shawmut avenue. Acme asphalt. Laid by Warren Brothers Company. | 329 | 700 | 1908 | Nov. 25, 1918. |
| Cortes street (city proper)..... | At Ferdinand street. Wood block. Laid by Fred S. & A. D. Gore Corporation. | 8 | 20 | 1911 | |
| Court avenue (city proper)..... | At Washington street. Brick block..... | 7 | 8 | 1910 | |
| Court street (city proper)..... | Washington street to 9 feet west of Washington street. Wood block. Laid by James Doherty. | 9 | 27 | 1908 | Nov. 21, 1918. |
| Court street (city proper)..... | 9 feet west of Washington street to Court square west. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 296 | 823 | 1904 | |
| Court square (city proper)..... | (East road) Court street to 8 feet south of Court street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 8 | 14 | 1904 | |
| Court square (city proper)..... | (East road) 8 feet south of Court street to 20 feet north of Williams court. Acme asphalt. Laid by Warren Brothers Company. | 263 | 800 | 1914 | Mar. 21, 1919. |
| Court square (city proper)..... | (East road) 20 feet north of Williams court to south of Williams court. Acme asphalt. Laid by Warren Brothers Company. | 37 | 118 | 1913 | |

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|--|--|-----|-------|-------------------------|
| Court square (city proper)..... | (South road) East road, Court square, to West road, Court square. Acme asphalt. Laid by Warren Brothers Company. | 74 | 181 | 1913 |
| Court square (city proper)..... | (West road) 291 feet south of Court street to 266 feet south of Court street. Acme asphalt. Laid by Warren Brothers Company. | 25 | 65 | 1913 |
| Court square (city proper)..... | (West road) 266 feet south of Court street to 148 feet south of Court street. Acme asphalt. Laid by Warren Brothers Company. | 118 | 305 | 1914 April 13, 1919. |
| Court square (city proper)..... | (West road) 148 feet south of Court street to 8 feet south of Court street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 140 | 346 | 1904 |
| Cumberland street (city proper)..... | At Huntington avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 4 | 17 | 1896 |
| Cunard street (Roxbury)..... | At Columbus avenue. Bermudes asphalt. Laid by Boston Asphalt Company. | 16 | 60 | 1906 |
| Curtis street (East Boston)..... | Bridge over Boston & Albany Railroad. Trinidad asphalt. Laid by E. R. Taylor Company. | 41 | 139 | 1906 |
| Custer street (West Roxbury)..... | At South street. Bitulithic. Laid by Warren Brothers Company..... | 1 | 3 | 1913 Nov. 25, 1918. |
| Custom House street (city proper)..... | At India street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 2 | 8 | 1901 |
| D street (South Boston)..... | 8 feet north of West Fifth street to 2 feet north of Gold street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 134 | 500 | 1889 |
| Dacia street (Roxbury)..... | 2 feet north of Woodcliff street to 3 feet south of Dove street. Bitulithic. Laid by Warren Brothers Company. | 294 | 850 | 1906 |
| Dakota street (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 3 | 14 | 1913 Oct. 21, 1918. |
| Danrell street (South Boston)..... | Dorchester avenue to 5 feet west of Ames street. Brick block. Laid by Central Construction Company. | 571 | 1,650 | 1910 |
| Dane street (West Roxbury)..... | 6 feet west of Holbrook street to Orchard street. Trinidad asphalt. Laid by Charles J. Jacobs Company. | 589 | 1,706 | 1915 Nov. 23, 1920. |
| Dartmouth street (city proper)..... | Each side of Warren avenue. Wood block. Laid by Boston Paving Company. | 8 | 30 | 1913 Dec. 13, 1918. |
| Dartmouth street (city proper)..... | At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 5 | 45 | 1906 |

List of Streets Having a Smooth Pavement — Continued.

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|--------------------------------------|---|--------------------|---------------------------|---------------|----------------------|
| Dartmouth street (city proper) | Bridge over New York, New Haven & Hartford Railroad. Wood block. Laid by New York, New Haven & Hartford Railroad Com- pany. Brick (in street car tracks). Laid by Boston Elevated Railway Company .. | 118 | 387 | 1913 | |
| Dartmouth street (city proper) | 3 feet south of Stuart street to Huntington avenue. Bitulithic. Laid by James Doherty. | 386 | 1,776 | 1912 | Sept. 13, 1917. |
| Dartmouth street (city proper) | Huntington avenue to 83 feet south of Boylston street. Bitulithic. Laid by Coleman Brothers | 151 | 134 | 1914 | Nov. 3, 1919. |
| Dartmouth street (city proper) | Acme asphalt. Laid by Warren Brothers Company | | 496 | 1912 | |
| Dartmouth street (city proper) | Trinidad asphalt. Laid by Barber Asphalt Paving Company | | 504 | 1901 | |
| Dartmouth street (city proper) | 83 feet north of Boylston street to 15 feet south of Boylston street. Acme asphalt. Laid by Warren Brothers Company | 68 | 10 | 1912 | Nov. 3, 1919. |
| Dartmouth street (city proper) | Bitulithic. Laid by Coleman Brothers | | 473 | 1914 | |
| Dartmouth street (city proper) | Trinidad asphalt. Laid by Barber Asphalt Paving Company | | 67 | 1901 | |
| Dartmouth street (city proper) | 15 feet south of Boylston street to Boylston street. Wood block. Laid by Coleman Brothers. | 15 | 128 | 1914 | Nov. 3, 1919. |
| Dartmouth street (city proper) | Boylston street to 15 feet north of Boylston street. Wood block. Laid by Coleman Brothers. | 15 | 117 | 1914 | Nov. 3, 1919. |
| Dartmouth street (city proper) | 15 feet north of Boylston street to north street line Public Alley Nos. 439 and 440. Bitulithic. Laid by Coleman Brothers. | 139 | 890 | 1914 | Nov. 3, 1919. |
| Dartmouth street (city proper) | North street line Public Alleys Nos. 439 and 440 to 4 feet south of New- bury street. Bitulithic. Laid by Warren Brothers. | 120 | 938 | 1914 | Oct. 24, 1919. |
| Dartmouth street (city proper) | 4 feet south of Newbury street to 9 feet south of south street line of Com- monwealth avenue. Bitulithic. Laid by Warren Brothers Company. | 296 | 2,303 | 1903 | |

| | | | 1,036 | 1916 | Nov. 22, 1921. |
|--------------------------------------|---|-------|-------|---------|----------------|
| Dartmouth street (city proper) | 9 feet south of south street line of Commonwealth avenue to 10 feet north of north street line of Commonwealth avenue. Bitulithic. Laid by Warren Brothers Company. | 219 | | 1916 | |
| Dartmouth street (city proper) | 10 feet north of north street line of Commonwealth avenue to Beacon street. Bitulithic. Laid by Warren Brothers Company. | 554 | 4,329 | 1903 | |
| Davenport street (Roxbury) | At Columbus avenue. Bermudes asphalt. Laid by Boston Asphalt Company. | 26 | 66 | 1905-07 | |
| Davis street (city proper) | 11 feet east of Washington street to 7 feet west of Harrison avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 305 | 610 | 1892 | |
| Davis street (city proper) | 7 feet west of Harrison avenue to Harrison avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 7 | 14 | 1901 | |
| Day street (Roxbury) | At Heath street. Brick block. Laid by Field, Barker & Underwood, Inc. | 5 | 36 | 1910 | |
| Dearborn place (Roxbury) | At Dearborn street. Acme asphalt. Laid by Warren Brothers Company. | 5 | 8 | 1916 | 1922. |
| Dearborn street (Roxbury) | Albany street to 56 feet south of Albany street. Bitulithic. Laid by Warren Brothers Company. | 56 | 220 | 1907 | Aug. 3, 1917. |
| Dearborn street (Roxbury) | 56 feet south of Albany street to 27 feet north of Dudley street. Acme asphalt. Laid by Warren Brothers Company. | 497 { | 998 | 1916 | 1922. |
| | Brick block gutters. Laid by Warren Brothers Company. | | 169 | 1916 | 1922. |
| Dearborn street (Roxbury) | 27 feet north of Dudley street to Dudley street. Brick block. Laid by James Doherty. | 27 | 176 | 1910 | |
| Deastur street (city proper) | 2 feet east of Washington street to 8 feet west of Harrison avenue. Sidilian rock asphalt. Laid by Boston Asphalt Company. | 355 | 751 | 1892 | |
| Deastur street (city proper) | 8 feet west of Harrison avenue to Harrison avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 8 | 16 | 1905 | |
| Deerfield street (Roxbury) | Commonwealth avenue to 18 feet north of Commonwealth avenue. Wood block. Laid by Clark & Gore. | 18 | 94 | 1915 | Sept. 2, 1920. |
| Derne street (city proper) | Temple street to 5 feet east of Hancock street. Brick block. Laid by J. E. Burns & Co. | 205 | 610 | 1909 | |
| Derne street (city proper) | 5 feet east of Hancock street to Hancock street. Bitulithic. Laid by Warren Brothers Company. | 5 | 30 | 1902 | |

List of Streets Having a Smooth Pavement—Continued.

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|---------------------------------------|--|--------------------|---------------------------|---------------|----------------------|
| Devonshire street (city proper) | Dock square to 75 feet south of Dock square (west side). Wood block. Laid by Bernard E. Grant. | ..... | 44 | 1916 | Dec. 14, 1921. |
| Devonshire street (city proper) | 75 feet south of Dock square to State street (each side of tracks). Wood block. Laid by Bernard E. Grant. | 230 | 517 | 1916 | Dec. 14, 1921. |
| Devonshire street (city proper) | State street to 7 feet south of Water street. Wood block. Laid by Bernard E. Grant. | 392 | 1,281 | 1916 | Dec. 14, 1921. |
| Devonshire street (city proper) | 7 feet south of Water street to 7 feet north of Milk street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 248 | 743 | 1909 | |
| Devonshire street (city proper) | 18 feet south of Milk street to 8 feet north of Franklin street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 409 | 1,378 | 1905 | |
| Devonshire street (city proper) | 9 feet north of Summer street to Summer street. Wood block. Laid by Northern Construction Company. | 9 | 51 | 1915 | Aug. 16, 1920. |
| DeWolf street (Dorchester) | At Hancock street. Brick block. Laid by Fred S. & A. D. Gore Cor- poration. | 8 | 24 | 1911 | |
| Dillaway street (city proper) | Dore street to Hollis street. Bitulithic. Laid by James Doherty | 259 | 452 | 1914 | Aug. 17, 1919. |
| Dillaway street (city proper) | 2 feet north of Hollis street to Hollis street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 2 | 4 | 1891 | |
| Dillon street (city proper) | Lenox street to Sawyer street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 204 | 295 | 1902 | |
| Doane street (city proper) | Broad street to 135 feet west of Broad street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 135 | 270 | 1910 | |
| Doane street (city proper) | 135 feet west of Broad street to Kilby street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 174 | 350 | 1881 | |
| Don street (Dorchester) | At Callender street. Trinidad asphalt. Laid by D. M. Biggs & Co. | 1 | 3 | 1915 | Sept. 15, 1920. |

| | | 1,312 | 5,775 | 1905 |
|--|---|-------|--------|------|
| Dorchester street (South Boston) | West Broadway to 129 feet north of West Eighth street, minus intersections at West Fourth and West Fifth streets, and (west side) from 120 feet north of West Eighth street to West Eighth street. Bitulithic. Laid by Warren Brothers Company. | ..... | 190 | 1904 |
| Dorchester street (South Boston) | 94 feet north of Vinton street to Vinton street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | ..... | 190 | 1904 |
| Dorchester street (South Boston) | 8 feet north of Rogers street to 154 feet north of Dorchester avenue. Bitulithic. Laid by Warren Brothers Company. | 152 | 613 | 1914 |
| Dorchester avenue (South Boston) | Ralston street to 140 feet south of Ralston street. Wood block. Laid by Coleman Brothers. | 140 | 402 | 1913 |
| Dore street (city proper) | 9 feet west of Washington street to 8 feet east of Tremont street. Bitulithic. Laid by Warren Brothers Company. | 437 | 775 | 1914 |
| Doria street (Dorchester) | At Erie avenue. Astec asphalt. Laid by Central Construction Company. | 7 | 21 | 1916 |
| Dove street (Roxbury) | At Dacia street. Bitulithic. Laid by Warren Brothers Company | 1 | 3 | 1906 |
| Downing street (Roxbury) | Whittier street to Vernon street. Brick block. Laid by J. E. Burns & Co. | 323 | 750 | 1909 |
| Dudley street (Roxbury) | 70 feet west of Guild row to 24 feet east of Harrison avenue. Wood block. Laid by James Doherty. | 841 | 4,134 | 1912 |
| Dudley street (Roxbury) | 4 feet east of Harrison avenue to 4 feet east of Magazine street. Brick block. Laid by James Doherty. | 2,666 | 10,755 | 1910 |
| Dudley street (Roxbury) | Dunmore street to Magazine street (east side). Sicilian rock asphalt. Laid by Boston Asphalt Company. | ..... | 350 | 1902 |
| Dundee street (Roxbury) | At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 4 | 13 | 1901 |
| Dunlap street (Dorchester) | Washington street to 11 feet west of Washington street. Wood block. Laid by William J. Barry. | 11 | 25 | 1913 |
| Dunlap street (Dorchester) | 11 feet west of Washington street to 6 feet east of Whitfield street. Trinidad asphalt. Laid by William J. Rafferty & Co. | 787 | 1,759 | 1915 |
| Dunmore street (Roxbury) | Dudley street to 57 feet east of Dudley street. Brick block. Laid by James Doherty. | 57 | 135 | 1910 |

Oct. 21, 1918.

Dec. 28, 1920.

List of Streets Having a Smooth Pavement — Continued.

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|---|---|--------------------|---------------------------|---------------|----------------------|
| Dunster road (West Roxbury) | Each side of Dane street. Trinidad asphalt. Laid by Charles J. Jacobs Company. | 14 | 49 | 1915 | Nov. 23, 1920. |
| Dwight street (city proper) | Shawmut avenue to Tremont street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 696 | 2,017 | 1893 | |
| E street (South Boston) | 5 feet south of Bolton street to West Third street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 106 | 392 | 1892 | |
| E street (South Boston) | West Broadway, across West Fourth street. Bitulithic. Laid by Warren Brothers Company. | 324 | 1,188 | 1903 | |
| E street (South Boston) | West Seventh street to West Eighth street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 311 | 500 | 1904 | |
| East Broadway (South Boston) | In front of Lincoln School. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 180 | 644 | 1897 | |
| East Concord street (city proper) | At Albany street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 12 | 45 | 1897 | |
| East Fourth street (South Boston) | Dorchester street to 4 feet east of Dorchester street. Bitulithic. Laid by Warren Brothers Company. | 4 | 17 | 1905 | |
| East Fourth street (South Boston) | P street to 96 feet west of Farragut road. Wood block. Laid by James Doherty. | 426 | 1,450 | 1911 | |
| East Fourth street (South Boston) | 96 feet west of Farragut road to Farragut road. Brick block. Laid by James Doherty. | 96 | 329 | 1911 | |
| Edinboro' street (city proper) | Essex street to Beach street. Acme asphalt. Laid by Warren Brothers Company. | 464 | 916 | 1912 | Dec. 4, 1917. |
| Edson street (Dorchester) | At Norfolk street. Bitulithic. Laid by James Doherty | 9 | 43 | 1914 | July 11, 1919. |
| Elgin street (West Roxbury) | Centre street to West Roxbury Branch, Boston & Providence Division, New York, New Haven & Hartford Railroad. Trinidad asphalt. Laid by Charles J. Jacobs Company. | 596 | 1,722 | 1915 | Dec. 2, 1920. |

PUBLIC WORKS DEPARTMENT.

345

| | | | |
|------------------------------------|---|------|----------------|
| Eliot street (city proper)..... | On south side at Pleasant street. Wood block. Laid by Coleman Brothers, 99 | 1914 | Dec. 13, 1918. |
| Eliot street (city proper)..... | East side of Pleasant street to Columbus avenue. Wood block. Laid by United States Wood Preserving Company. 104 | 1907 | Nov. 30, 1917. |
| Eliot street (West Roxbury)..... | At Centre street. Bitulithic. Laid by Warren Brothers Company..... 2 | 1913 | Nov. 25, 1918. |
| Emerald street (city proper)..... | Castle street to Dover street. Bitulithic. Laid by Warren Brothers Com- 898 | 1904 | |
| Endicott street (city proper)..... | Cooper street, across Thacher street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. 318 | 1899 | |
| Eric avenue (Dorchester)..... | Savin Hill avenue to 67 feet north of Doris street. Astec asphalt. Laid by Central Construction Company. 337 | 1916 | Nov. 17, 1921. |
| Essex place (city proper)..... | Tufta street to 7 feet south of Essex street. Sicilian rock asphalt. Laid by Boston Asphalt Company. 195 | 1901 | |
| Essex street (Brighton)..... | At Commonwealth avenue. Wood block. Laid by Clark & Gore..... 22 | 1915 | Sept. 2, 1920. |
| Essex street (Brighton)..... | Bridge abutment to Cambridge line. Wood block. Laid by James Doherty, 520 | 1913 | Oct. 10, 1918. |
| Eustis street (Roxbury)..... | 138 feet east of Winslow street to 163 feet west of Albany street. Trini- 130 | 1906 | |
| Eustis street (Roxbury)..... | dad asphalt. Laid by Barber Asphalt Paving Company. } 12 { | 1916 | 1922 |
| Eustis street (Roxbury)..... | 12 feet west of Dearborn street to Dearborn street. } 2 | 1916 | 1922. |
| Eustis street..... | Acme asphalt. Laid by Warren Brothers Company..... } 16 | 1916 | 1922. |
| Eustis street..... | Dearborn street to 6 feet east of Dearborn street. } 4 | 1916 | 1922. |
| Eustis street (Roxbury)..... | Brick block gutters. Laid by Warren Brothers Company..... } 6 { | 1916 | 1922. |
| Eustis street (Roxbury)..... | Brick block gutters. Laid by Warren Brothers Company..... } 1,270 | 1914 | Sept. 4, 1919. |
| Eustis street (Roxbury)..... | 6 feet east of Dearborn street to 9 feet west of Hampden street. Bitulithic. Laid by John F. Beatty. 1,270 | 1914 | |
| Eustis street (Roxbury)..... | Hampden street to Magazine street. Bitulithic. Laid by John F. Beatty, 686 | 1914 | Sept. 4, 1919. |
| Everton street (Dorchester)..... | Between Olney street and Geneva avenue. Topoka. Laid by Central Construction Company. 424 | 1916 | 1922. |
| Exchange place (city proper)..... | 8 feet east of Congress street to Kilby street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. 237 | 1903 | |
| Exchange street (city proper)..... | 173 feet north of State street to 25 feet south of Dock square. Wood block. Laid by Central Construction Company. 139 | 1913 | Dec. 4, 1918. |

List of Streets Having a Smooth Pavement — Continued.

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|-------------------------------------|---|--------------------|---------------------------|---------------|----------------------|
| Exeter place (city proper)..... | 8 feet west of Chauncy street to 7 feet east of Harrison avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 155 | 353 | 1897 | |
| Exeter street (city proper)..... | At Huntington avenue. Bitulithic. Laid by Fred S. & A. D. Gore Corporation..... | ..... | 14 | 1912 | Aug. 17, 1917. |
| | Bitulithic. Laid by Warren Brothers Company..... | ..... | 5 | 1909 | |
| Exeter street (city proper)..... | Huntington avenue to 16 feet south of Boylston street. Bitulithic. Laid by Boston Elevated Railway Company. | 541 | 2,126 | 1914 | Nov., 1919. |
| Exeter street (city proper)..... | 16 feet south of Boylston street to Boylston street. Bitulithic. Laid by Coleman Brothers. | 16 | 85 | 1914 | Nov. 3, 1919. |
| Exeter street (city proper)..... | Boylston street to 15 feet north of Boylston street. Bitulithic. Laid by Coleman Brothers. | 15 | 60 | 1914 | Nov. 3, 1919. |
| Exeter street (city proper)..... | South street line of Commonwealth avenue to north street line of Commonwealth avenue. Bitulithic (macadam base). Laid by Warren Brothers Company. | 220 | 730 | 1916 | Nov. 22, 1921. |
| Exeter street (city proper)..... | South side of Marlborough street, Bitulithic. Laid by James Doherty.... | 3 | 13 | 1914 | Aug. 3, 1919. |
| Exeter street (city proper)..... | North side of Marlborough street. Bitulithic. Laid by James Doherty.... | 2 | 9 | 1914 | Aug. 3, 1919. |
| Exeter street (city proper)..... | At Beacon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 2 | 9 | 1909 | |
| Fabin street (city proper)..... | Newland street to Ivanhoe street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 415 | 606 | 1895 | |
| Fabyan street (Dorchester)..... | 15 feet east of Blue Hill avenue to 6 feet west of Harvard street. Trinidad asphalt. Laid by Martino DeMatteo. | 691 | 1,996 | 1915 | May 23, 1920. |
| Fairfield street (city proper)..... | At Boylston street. Bitulithic. Laid by Warren Brothers Company..... | 5 | 23 | 1913 | Aug. 13, 1918. |
| Fairfield street (city proper)..... | Each side at Marlborough street. Bitulithic. Laid by James Doherty..... | 6 | 26 | 1914 | Aug. 3, 1919. |

| | | 3 | 12 | 1909 | |
|--|---|-----|-------|------|----------------|
| Fairfield street (city proper)..... | At Beacon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | | | | |
| Falmouth street (Roxbury)..... | 6 feet north of Norway street to 6 feet north of Massachusetts avenue. Wood block. Laid by James Doherty. | 634 | 2,433 | 1909 | |
| Falmouth street (Roxbury)..... | 6 feet north of Massachusetts avenue to Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 6 | 25 | 1901 | |
| Farrington avenue (Brighton)..... | At Harvard avenue. Bitulithic. Laid by Coleman Brothers..... | 2 | 6 | 1914 | Aug. 7, 1919. |
| Fay street (city proper)..... | 5 feet west of Harrison avenue to 8 feet south of Dover street (cobble base). Sicilian rock asphalt. Laid by Boston Asphalt Company. | 305 | 532 | 1894 | |
| Fayette street (city proper)..... | Pleasant street to 7 feet west of Pleasant street. Wood block. Laid by Coleman Brothers. | 7 | 16 | 1913 | Dec. 13, 1918. |
| Fayette street (city proper)..... | 7 feet west of Pleasant street to Ferdinand street. Wood block. Laid by Fred S. & A. D. Gore Corporation. | 839 | 1,914 | 1911 | |
| Fenelon street (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 10 | 30 | 1912 | Oct. 21, 1918. |
| Ferdinand street (city proper)..... | See Castle square. | | | | |
| Ferdinand street (city proper)..... | 16 feet north of Boston & Albany Railroad Bridge to 50 feet north of Isabella street. Wood block. Laid by Fred S. & A. D. Gore Corporation. | 376 | 1,069 | 1911 | |
| Fernboro street (Dorchester)..... | Lawrence avenue to Intervale street. Trinidad asphalt. Laid by James Doherty. | 487 | 1,412 | 1916 | June 28, 1921. |
| Florence street (city proper)..... | Washington street to Harrison avenue. Bitulithic. Laid by Warren Brothers Company. | 335 | 670 | 1908 | |
| Franklin street (city proper)..... | At India street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 1 | 3 | 1901 | |
| G street (South Boston)..... | 110 feet north of East Sixth street to 178 feet north of East Seventh street. Bitulithic. Laid by Warren Brothers Company. | 230 | 828 | 1905 | |
| Gainsborough street (Roxbury)..... | 10 feet east of Huntington avenue to Providence Division of New York, New Haven & Hartford Railroad. Bitulithic. Laid by Warren Brothers Company. | 539 | 2,037 | 1903 | |
| Garden Court street (city proper)..... | North square to 7 feet south of Fleet street. Bitulithic. Laid by Warren Brothers Company. | 226 | 365 | 1906 | |

List of Streets Having a Smooth Pavement — *Continued.*

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|--------------------------------------|---|--------------------|---------------------------|---------------|----------------------|
| Gardner street (Brighton)..... | At Harvard avenue. Bitulithic. Laid by Coleman Brothers..... | 2 | 6 | 1914 | Aug. 7, 1919. |
| Garrison street (city proper)..... | At Huntington avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 4 | 16 | 1896 | |
| Gates street (South Boston)..... | At Dorchester street. Bitulithic. Laid by Warren Brothers Company..... | 5 | 16 | 1905 | |
| Gay street (Roxbury)..... | At Linden Park street. Brick block. Laid by J. E. Burns & Co..... | 8 | 19 | 1909 | |
| Gaylord street (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 3 | 9 | 1913 | Oct. 21, 1918. |
| Genesee street (city proper)..... | 2 feet east of Harrison avenue to 2 feet west of Albany street. Seyssel rock asphalt. Laid by Jones & Meehan. | 501 | 1,112 | 1899 | |
| Geneva avenue (Dorchester)..... | 185 feet west of Beechwood street to 10 feet east of Bowdoin street. Brick block. Laid by Central Construction Company. | 1,329 | 5,123 | 1911 | |
| Glenarm street (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 10 | 23 | 1912 | Oct. 21, 1918. |
| Glendale street (Dorchester)..... | At Hancock street. Brick block. Laid by Central Construction Company. | 10 | 23 | 1911 | |
| Glendower road (West Roxbury)..... | Kittredge street to Poplar street. Trinidad asphalt. Laid by Charles J. Jacobs Company. | 1,928 | 5,578 | 1915-16 | July 14, 1921. |
| Glenville avenue (Brighton)..... | At Harvard avenue. Bitulithic. Laid by Coleman Brothers..... | 2 | 6 | 1914 | Aug. 7, 1919. |
| Gloucester street (city proper)..... | At Boylston street. Bitulithic. Laid by Warren Brothers Company..... | 5 | 23 | 1913 | Aug. 13, 1918. |
| Gloucester street (city proper)..... | Each side of Newbury street. Wood block. Laid by United States Wood Preserving Company. | 7 | 31 | 1901 | |
| Gloucester street (city proper)..... | Each side of Marlborough street. Bitulithic. Laid by James Doherty..... | 6 | 26 | 1914 | Aug. 3, 1919. |
| Gloucester street (city proper)..... | At Beacon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 3 | 13 | 1909 | |
| Gold street (South Boston)..... | B street to C street. Sicilian rock asphalt. Laid by Jones & Meehan..... | 512 | 730 | 1901 | |

| | | | | | |
|-------------------------------------|--|-------|-------|------|-----------------|
| Gold street (South Boston)..... | C street to D street. Sicilian rock asphalt. Laid by Jones & Meehan..... | 513 | 741 | 1901 | |
| Gold street (South Boston)..... | At Dorchester street. Bitulithic. Laid by Warren Brothers Company. | 4 | 6 | 1905 | |
| Grace street (Dorchester)..... | Walton street to Roelin street. Bitulithic. Laid by D. M. Biggs & Co..... | 303 | 873 | 1915 | Aug. 19, 1920. |
| Granby street (Roxbury)..... | At Commonwealth avenue. Wood block. Laid by Clark & Gore..... | 19 | 88 | 1915 | Sept. 2, 1920. |
| Gray street (city proper)..... | At Clarendon street. Bitulithic. Laid by Warren Brothers Company..... | 3 | 7 | 1914 | Sept. 25, 1919. |
| Greenough avenue (West Roxbury).... | At Centre street. Bitulithic. Laid by Warren Brothers Company..... | 2 | 18 | 1913 | Nov. 25, 1918. |
| Greenville street (Roxbury)..... | At Dudley street. Brick block. Laid by James Doherty..... | 8 | 20 | 1910 | |
| Greenwich park (city proper)..... | At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 9 | 34 | 1906 | |
| Groton street (city proper)..... | Washington street to Shawmut avenue (block base). Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 316 | 528 | 1892 | |
| Guild row (Roxbury)..... | 42 feet north of Dudley street to Dudley street. Wood block. Laid by James Doherty. | 42 | 257 | 1912 | Sept. 21, 1917. |
| Half Moon street (Dorchester)..... | At Lingard street. Bitulithic. Laid by James Doherty..... | 1 | 8 | 1915 | Sept. 17, 1920. |
| Halleck street (Roxbury)..... | At Station street. Bitulithic. Laid by John F. Beatty..... | 1 | 3 | 1914 | Dec. 18, 1919. |
| Hamburg street (city proper)..... | Myatie street to Harrison avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 375 | 585 | 1896 | |
| Hamlet street (Dorchester)..... | Belden street to Columbia road. Trinidad asphalt. Laid by Central Construction Company. | 409 | 909 | 1915 | July 22, 1920. |
| Hammond street (city proper)..... | Shawmut avenue to Tremont street. Wood block. Laid by Fred S. & A. D. Gore Corporation. | 1,115 | 4,214 | 1912 | Nov. 12, 1917. |
| Hampshire street (Roxbury)..... | Ruggles street to Whittier street. Brick block. Laid by J. E. Burns & Co. | 362 | 1,050 | 1909 | |
| Hampshire street (Roxbury)..... | Whittier street to Vernon street. Brick block. Laid by J. E. Burns & Co., | 364 | 1,055 | 1909 | |
| Hampshire street (Roxbury)..... | Vernon street to Linden Park street. Brick block. Laid by J. E. Burns & Co., | 645 | 1,864 | 1909 | |
| Hancock street (city proper)..... | Mt. Vernon street to 4 feet north of Mt. Vernon street. Brick..... | 4 | 14 | 1901 | |

List of Streets Having a Smooth Pavement—Continued.

| Streets. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|------------------------------------|--|--------------------|---------------------------|---------------|----------------------|
| Hancock street (city proper)..... | 4 feet north of Mt. Vernon street to 7 feet south of Cambridge street. Bitulithic. Laid by Warren Brothers Company. | 928 | 2,383 | 1902 | |
| Hancock street (Dorchester)..... | At Columbia road (west road). Bitulithic (macadam base). Laid by Warren Brothers Company. | ..... | 281 | 1915 | May 26, 1920. |
| Hancock street (Dorchester)..... | Columbia road to 345 feet northwest of DeWolf street. Brick block. Laid by Central Construction Company. | 2,221 | 9,672 | 1910-11 | |
| Hancock street (Dorchester)..... | At Bowdoin street. Brick block. Laid by Central Construction Com- pany. | ..... | 205 | 1913 | Sept. 12, 1918. |
| Hancock street (Dorchester)..... | 345 feet northwest of DeWolf street to Dorchester avenue. Brick block. Laid by Fred S. & A. D. Gore Corporation. | 1,416 | 5,684 | 1911 | |
| Hanover avenue (city proper)..... | Hanover street to 7 feet west of North street. Trinidad asphalt (cobble base). Laid by Barber Asphalt Paving Company. | 300 | 256 | 1892 | |
| Hanover street (city proper)..... | (West side) Tileston street, across Charter street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 315 | 425 | 1907 | July 22, 1917. |
| Hanover street (city proper)..... | (East side) Tileston street, across Charter street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | ..... | 323 | 1896 | |
| Harris avenue (West Roxbury)..... | At Centre street. Bitulithic. Laid by Warren Brothers Company..... | 2 | 5 | 1913 | Nov. 25, 1918. |
| Harris street (city proper)..... | Hanover street to 10 feet east of Hanover street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 10 | 11 | 1896 | |
| Harris street (city proper)..... | 10 feet east of Hanover street to 9 feet west of North street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 281 | 352 | 1904 | |
| Harrison avenue (city proper)..... | 22 feet south of Kneeland street to 22 feet north of Harvard street. Trini- dad asphalt. Laid by Barber Asphalt Paving Company. | 249 | 885 | 1899 | |
| Harrison avenue (city proper)..... | Bridge over Boston & Albany Railroad. Wood block. Laid by Central Construction Company. Maintained by railroad company. | 55 | 179 | 1915 | |

| | | | | |
|------------------------------------|---|-------|--------------|--|
| Harrison avenue (city proper)..... | Asylum street, across Davis street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 158 | 300 | 1901 |
| Harrison avenue (city proper)..... | Northerly side of Decatur street, across Gloucester place. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 143 | 270 | 1905 |
| Harrison avenue (city proper)..... | Brow to track at Union Park street. Wood block. Laid by Fred S. & A. D. Gore Corporation. | ..... | 12 | 1913 June 28, 1918. |
| Harrison avenue (city proper)..... | At Union Park street. Acme asphalt. Laid by Fred S. & A. D. Gore Corporation. | ..... | 140 | 1913 June 28, 1918. |
| Harrison avenue (city proper)..... | North side of Union Park street, across Malden street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 248 | 433 | 1902-03 |
| Harrison avenue (city proper)..... | Malden street to East Dedham street. Acme asphalt. Laid by Warren Brothers Company. | 382 | 918 | 1909 |
| Harrison avenue (city proper)..... | East Newton street to 6 feet north of East Springfield street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 922 { | 948 1,716 | 1893 1895 |
| Harrison avenue (city proper)..... | 7 feet south of East Springfield street to 104 feet south of East Springfield street (east side). Trinidad asphalt. Laid by Barber Asphalt Paving Company. | ..... | 140 | 1888 |
| Harrison avenue (city proper)..... | 6 feet north of East Springfield street to Northampton street, not including 7 feet south of East Springfield street to 104 feet south of East Springfield street (east side). Bitulithic. Laid by Warren Brothers Company. | 508 | 1,174 | 1905 |
| Harrison avenue (city proper)..... | South side of Northampton street to north side of East Lenox street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 427 | 1,090 | 1903 |
| Harrison avenue (Roxbury)..... | At Dudley street. Wood block. Laid by James Doherty..... | 16 | 72 | 1912 Sept. 21, 1917. |
| Harvard avenue (Brighton)..... | Brighton avenue to 20 feet north of Commonwealth avenue. Bitulithic. Laid by Coleman Brothers..... | 884 { | 3,211 600 | 1914 1914 Aug. 7, 1919. Aug. 7, 1919. |
| Harvard avenue (Brighton)..... | 19 feet south of Cambridge street to Brighton avenue. Bitulithic. Laid by Coleman Brothers..... | 843 { | 2,594 887 | 1914 1914 Aug. 7, 1919. Aug. 7, 1919. |

List of Streets Having a Smooth Pavement—Continued.

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Quaranty Expires. |
|-----------------------------------|---|--------------------|---------------------------|---------------|----------------------|
| Harvard avenue (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 16 | 90 | 1912 | Oct. 21, 1918. |
| Harvard Bridge (city proper)..... | Boston side of draw to 270 feet west of southerly abutment. Wood block. Laid by Fred S. & A. D. Gore Corporation. | 708 | 3,994 | 1913 | Jan. 27, 1918. |
| Harvard Bridge (city proper)..... | 270 feet west of southerly abutment to southerly abutment. Wood block. Laid by Fred S. & A. D. Gore Corporation. | 270 | 1,080 | 1912-13 | Jan. 27, 1918. |
| Harvard Bridge (city proper)..... | Boston side of draw to south abutment. Brick block (each side of rails). Laid by Fred S. & A. D. Gore Corporation. | ..... | 467 | 1912-13 | Jan. 27, 1918. |
| Harvard street (city proper)..... | Washington street to Harrison avenue. Wood block. Laid by J. H. McCarthy. | 408 | 861 | 1910 | |
| Harvard street (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 10 | 76 | 1912 | Oct. 21, 1918. |
| Harwood street (Dorchester)..... | Willowwood street to Lucerne street. Trinidad asphalt. Laid by James Doherty. | 723 | 2,112 | 1916 | Dec. 3, 1921. |
| Haskins street (Roxbury)..... | Ruggles street to 6 feet south of Ruggles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 6 | 14 | 1907 | Aug. 23, 1917. |
| Haskins street (Roxbury)..... | 6 feet north of Vernon street to Vernon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 6 | 13 | 1907 | Nov. 30, 1917. |
| Haviland street (Roxbury)..... | At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 5 | 14 | 1901 | |
| Hawes street (city proper)..... | 9 feet east of Congress street to Kilby street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 249 | 246 | 1904 | |
| Hawley street (city proper)..... | At Summer street. Wood block. Laid by Northern Construction Company. | 8 | 25 | 1915 | Aug. 16, 1920. |
| Hayward place (city proper)..... | Washington street to 9 feet east of Washington street. Wood block. Laid by United States Wood Preserving Company. | 9 | 20 | 1906 | |

| Wayward place (city proper) | 9 feet east of Washington street to Harrison avenue. Acme asphalt. Laid by Boston Paving Company. | 251 | 565 | 1913 | Aug. 10, 1918. |
|---------------------------------|--|-------|--------|---------|-----------------|
| Heath street (Roxbury) | Parker street to 7 feet north of Lawn street and from 72 feet north of Lawn street to 86 feet south of South Huntington avenue. Brick block. Laid by Field, Barker & Underwood, Inc. | 3,045 | 12,627 | 1910 | |
| Helen street (Dorchester) | 7 feet west of Bernard street to 17 feet east of Talbot avenue. Trinidad asphalt. Laid by James Doherty. | 331 | 1,003 | 1915 | Nov. 2, 1920. |
| Helen street (Dorchester) | 15 feet east of Talbot avenue to Talbot avenue. Brick block. Laid by James Doherty. | 15 | 93 | 1911 | |
| Hemenway street (Roxbury) | At Boylston street. Bitulithic. Laid by Warren Brothers Company. | 5 | 25 | 1905 | |
| Heushaw street (Brighton) | At Cambridge street. Bitulithic. Laid by Warren Brothers Company. | 25 | 274 | 1913 | Oct. 24, 1918. |
| Hereford street (Roxbury) | Each side of Newbury street. Wood block. Laid by Patrick McGovern. | 7 | 31 | 1903 | |
| Hereford street (city proper) | Each side of Marlborough street. Bitulithic. Laid by James Doherty. | 6 | 28 | 1914 | Aug. 3, 1919. |
| Hereford street (city proper) | At Beacon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 3 | 12 | 1907 | Sept. 16, 1917. |
| High street (Dorchester) | At Hancock street. Brick block. Laid by Fred S. & A. D. Gore Corporation. | 8 | 29 | 1911 | |
| Hillcrest street (West Roxbury) | At Elgin street. Trinidad asphalt. Laid by Charles J. Jacobs Company. | 7 | 23 | 1915 | Dec. 2, 1920. |
| Hinsdale street (Roxbury) | Commonwealth avenue to Cunningham street. Brick block. Laid by Fred S. & A. D. Gore Corporation. | 326 | 1,232 | 1911 | |
| Hollis street (city proper) | 10 feet east of Tremont street toward Washington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 251 | 473 | 1891 | |
| Holyoke street (city proper) | At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 9 | 34 | 1906-07 | |
| Hopetill street (Dorchester) | 3 feet south of Aspinwall road to 8 feet south of Aspinwall road. Brick block. | 5 | 14 | 1907 | |
| Hopetill street (Dorchester) | 10 feet south of Aspinwall road to 6 feet north of Southern avenue. Trinidad asphalt. Laid by Charles J. Jacobs Company. | 302 | 872 | 1915 | May 29, 1920. |

List of Streets Having a Smooth Pavement — *Continued.*

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|--------------------------------------|--|--------------------|---------------------------|---------------|----------------------|
| Howe street (Dorchester)..... | At Hancock street. Brick block. Laid by Central Construction Company. | 10 | 29 | 1910 | |
| Howland street (Roxbury)..... | 231 feet west of Humboldt avenue to 6 feet east of Harold street. Bitu- lithic. Laid by John F. Beatty. | 422 | 1,219 | 1915 | July 19, 1920. |
| Hubert street (Roxbury)..... | Shawmut avenue to Westminster street. Astco asphalt. Laid by Central Construction Company. | 447 | 1,292 | 1916 | Aug. 18, 1921. |
| Hudson street (city proper)..... | 7 feet south of Beach street to 7 feet north of Kneeland street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 304 | 811 | 1891 | |
| Hudson street (city proper)..... | 7 feet south of Kneeland street to 6 feet north of Harvard street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 361 | 963 | 1891 | |
| Hudson street (city proper)..... | 6 feet south of Harvard street to 90 feet north of Curve street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 817 | 2,179 | 1891 | |
| Huntington avenue (city proper)..... | At Boylston street (east side). Bitulithic. Laid by Coleman Brothers..... Trinidad asphalt. Laid by Barber Asphalt Paving Company..... | ..... | 444 302 | 1914 1901 | Nov. 3, 1919. |
| Huntington avenue (city proper)..... | Boylston street to 159 feet south of Boylston street (west side). Wood block. Laid by Coleman Brothers. | 159 | 786 | 1914 | Nov. 3, 1919. |
| Huntington avenue (city proper)..... | At St. James avenue. Bitulithic. Laid by James Doherty..... | 100 | 578 | 1912 | Sept. 13, 1917. |
| Huntington avenue (city proper)..... | At St. James avenue and Dartmouth street. Bitulithic. Laid by Boston Elevated Railway Company. | 40 | 328 | 1914 | Nov., 1919. |
| Huntington avenue (city proper)..... | At Dartmouth street. Acme asphalt. Laid by Warren Brothers Company. | ..... | 180 | 1912 | |
| Huntington avenue (city proper)..... | 159 feet south of Boylston street to 9 feet south of Dartmouth street. Trinidad asphalt. Laid by Barber Asphalt Paving Company..... Bitulithic. Laid by Boston Elevated Railway Company..... | 325 { | 2,570 177 | 1901 1914 | Nov., 1919. |
| Huntington avenue (city proper)..... | 9 feet south of Dartmouth street to 84 feet north of bridge over Boston & Albany Railroad. Bitulithic. Laid by Warren Brothers Company. | 600 | 3,350 | 1908 | |

| | | | 400 | 1009 | | | |
|--------------------------------------|--|-------|-----|------|----------------|--|--|
| Huntington avenue (city proper)..... | 84 feet north of bridge over Boston & Albany Railroad to bridge over Boston & Albany Railroad. Bitulithic. Laid by Warren Brothers Company. | 84 | | 1009 | | | |
| Huntington avenue (city proper)..... | At Exeter street. Bitulithic. Laid by Boston Elevated Railway Company. | ..... |  | 1914 | Nov., - 1919. | | |
| Huntington avenue (city proper)..... | Bridge over Boston & Albany Railroad. Wood block. Laid by Central Construction Company. | 92 | | 1916 | Dec. 11, 1921. | | |
| Huntington avenue (city proper)..... | Bridge over Boston & Albany Railroad to 70 feet south of bridge over Boston & Albany Railroad. Trinidad asphalt. Laid by Simpson Brothers Corporation. | 70 | | 1909 | | | |
| Huntington avenue (city proper)..... | 70 feet south of bridge over Boston & Albany Railroad to north side of Cumberland street, minus 685 feet north of West Newton street to 38 feet north of West Newton street (west roadway). Sicilian rock asphalt. Laid by Boston Asphalt Company. | 1,520 | | 1896 | | | |
| Huntington avenue (city proper)..... | 685 feet north of West Newton street to 38 feet north of West Newton street (west roadway). Trinidad asphalt. Laid by Barber Asphalt Paving Company. | ..... |  | 1907 | Oct. 24, 1917. | | |
| Huntington avenue (Roxbury)..... | North side of Cumberland street to 10 feet north of Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 737 | | 1896 | | | |
| Huntington avenue (Roxbury)..... | 9 feet south of Massachusetts avenue to 8 feet north of Gainsborough street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 870 | | 1896 | | | |
| I street (South Boston)..... | East Broadway to East Fourth street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 252 | | 1910 | | | |
| Idlewild street (Brighton)..... | 17 feet south of Commonwealth Avenue to 7 feet north of Brainerd road. Bitulithic. Laid by Charles J. Jacobs Company. | 363 | | 1915 | Sept. 3, 1920. | | |
| India street (city proper)..... | Milk street to India street (formerly India square). Sicilian rock asphalt. Laid by Boston Asphalt Company. | 549 | | 1901 | | | |
| Intervale street (Dorchester)..... | Each side of Normandy street. Ariseo asphalt. Laid by Central Construction Company. | 2 | | 1916 | Oct. 13, 1921. | | |
| Ipswich street (Roxbury)..... | Bridge over waterway. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 61 | | 1898 | | | |
| Irrington street (city proper)..... | At Huntington avenue. Trinidad asphalt. Laid by Simpson Brothers Corporation. | 5 | | 1909 | | | |

List of Streets Having a Smooth Pavement—Continued.

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|------------------------------------|---|--------------------|---------------------------|---------------|----------------------|
| Isabella street (city proper)..... | At Ferdinand street. Wood block. Laid by Fred S. & A. D. Gore Corporation. | 8 | 20 | 1911 | |
| Jerome street (Dorchester)..... | At Hancock street. Brick block. Laid by Central Construction Company. | 10 | 42 | 1911 | |
| Joiner street (Charlestown)..... | Park street to Chelsea street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 161 | 413 | 1906 | |
| Jones avenue (Dorchester)..... | Mascot street to Ballou avenue. Trinidad asphalt. Laid by James Doherty. | 984 | 2,855 | 1916 | June 13, 1921. |
| K street (South Boston)..... | East Fourth street to East Sixth street. American rock asphalt. Laid by Jones & Meehan. | 600 | 2,113 | 1906 | |
| K street (South Boston)..... | East Sixth street to East Eighth street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 596 | 1,063 | 1896 | |
| Kennard avenue (city proper)..... | At Poplar street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 1 | 3 | 1887 | |
| Kennard avenue (city proper)..... | At Allen street. Bitulithic. Laid by Warren Brothers Company..... | 2 | 4 | 1905 | |
| Kenney street (Roxbury)..... | Day street to 503 feet west of Day street. Trinidad asphalt. Laid by James Doherty. | 503 | 1,113 | 1915 | Nov. 10, 1920. |
| Kent street (Roxbury)..... | Roxbury street to Vernon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 440 | 933 | 1911 | |
| Kenwood street (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 10 | 30 | 1913 | Oct. 21, 1918. |
| Kerwin street (Dorchester)..... | At Talbot avenue (crosswalk) Brick block. Laid by James Doherty. | 9 | 51 | 1907 | |
| | Brick block. Laid by James Doherty. | 5 | 37 | 1911 | |
| Kilby street (city proper)..... | Milk street to 6 feet north of Milk street. Wood block. Laid by James Doherty. | 6 | 70 | 1910 | |

| | | | |
|--|-------|-------|-----------------|
| Kilby street (city proper)..... | ..... | 1,292 | 1898 |
| 6 feet north of Milk street to 56 feet south of Water street (west side). Trinidad asphalt. Laid by Barber Asphalt Paving Company. | | | |
| Kilby street (city proper)..... | 394 | 1,520 | 1908 |
| 6 feet north of Milk street, across Central street (east side). American rock asphalt. Laid by Jones & Meehan. | | | Aug. 31, 1918. |
| Kilby street (city proper)..... | 240 | 672 | 1915 |
| Central street to State street. Trinidad asphalt. Laid by Central Construction Company. | | | |
| Kilby street (city proper)..... | ..... | 505 | 1881 |
| At Liberty square. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | | | |
| Kingston street (city proper)..... | 6 | 18 | 1915 |
| Summer street to 6 feet south of Summer street. Wood block. Laid by Northern Construction Company. | | | Aug. 16, 1920. |
| Kingston street (city proper)..... | 479 | 1,828 | 1910 |
| Essex street to Beach street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | | | |
| Kirkland street (city proper)..... | 361 | 519 | 1909 |
| 10 feet south of Pleasant street toward Corning street. Acme asphalt. Laid by Warren Brothers Company. | | | |
| Kittridge street (West Roxbury)..... | 547 | 1,588 | 1916 |
| Cornell street to Beech street. Bitulithic. Laid by Charles J. Jacobs Company. | | | July 6, 1921. |
| Laconia street (city proper)..... | 314 | 687 | 1896 |
| Washington street to Harrison avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | | | |
| La Grange street (city proper)..... | 181 | 355 | 1897 |
| Tremont street, toward Washington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | | | |
| Lamont street (Roxbury)..... | 14 | 25 | 1909 |
| At Linden Park and Vernon streets. Brick block. Laid by J. E. Burns & Co. | | | |
| Lawn street (Roxbury)..... | 8 | 32 | 1910 |
| At Heath street. Brick block. Laid by Field, Barker & Underwood, Inc., | | | |
| Lawn street (Roxbury)..... | 8 | 23 | 1910 |
| At Heath street. Brick block. Laid by Field, Barker & Underwood, Inc., | | | |
| Lawrence street (city proper)..... | 4 | 9 | 1906 |
| At Berkeley street. Bitulithic. Laid by Warren Brothers Company..... | | | |
| Lawrence street (city proper)..... | 5 | 14 | 1914 |
| Each side of Clarendon street. Bitulithic. Laid by Warren Brothers Company. | | | Sept. 25, 1919. |
| Lawrence street (Charlestown)..... | 385 | 1,014 | 1901 |
| East side of Lawrence avenue, across Miller street. Sicilian rock asphalt. Laid by Jones & Meehan. | | | |

List of Streets Having a Smooth Pavement — *Continued.*

| Streets. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|-------------------------------------|---|--------------------|---------------------------|---------------|----------------------|
| Lealie street (Dorchester)..... | Dix street to Centre street. Trinidad asphalt. Laid by D. M. Biggs & Co., | 374 | 1,080 | 1915 | Oct. 16, 1920. |
| Lewis street (city proper)..... | At Moon street. Bitulithic. Laid by Warren Brothers Company..... | 1 | 2 | 1906 | |
| Lincoln place (city proper)..... | Worcester street to West Springfield street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 203 | 298 | 1897 | |
| Linden Park street (Roxbury)..... | 12 feet east side of Cabot street to 4 feet east of Elmwood street. Brick block. Laid by J. E. Burns & Co. | 1,015 | 3,242 | 1909 | |
| Lingard street (Dorchester)..... | Magnolia street to Hartford street. Bitulithic. Laid by James Doherty... | 594 | 1,791 | 1915 | Sept. 17, 1920. |
| Long avenue (Brighton)..... | Commonwealth avenue to Allston street. Trinidad asphalt. Laid by Central Construction Company. | 765 | 2,785 | 1914 | Dec. 14, 1919. |
| Longwood avenue (Roxbury)..... | 51 feet north of Huntington avenue to 9 feet south of Brookline avenue. Brick block. Laid by Field, Barker & Underwood, Inc. | 2,078 | 7,850 | 1910 | |
| Lorette street (West Roxbury)..... | Centre street to 18 feet east of Hillcrest street. Acme asphalt. Laid by Central Construction Company. | 486 | 1,404 | 1916 | 1922. |
| Loving place (city proper)..... | Washington street to Harrison avenue. Acme asphalt. Laid by James Doherty. | 306 | 525 | 1913 | June 16, 1918. |
| Lucas street (city proper)..... | Middlesex street to 2 feet north of Shawmut avenue. Asphalt blocks..... | 98 | 81 | 1902 | |
| Lucas street (city proper)..... | 2 feet north of Shawmut avenue to Shawmut avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 2 | 2 | 1898 | |
| Lucas street (city proper)..... | Shawmut avenue to 2 feet north of Shawmut avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 2 | 2 | 1898 | |
| Lucas street (city proper)..... | 10 feet south of Shawmut avenue to 9 feet north of Washington street. Scoria block. Laid by Paving Service. | 322 | 254 | 1915 | |
| Lyndehurst street (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 10 | 30 | 1913 | Oct. 21, 1918. |

| | | | | | |
|---------------------------------------|--|-------|---------|--------------|----------------------------------|
| Lynn street (city proper)..... | Cooper street to Thacher street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 284 | 457 | 1906 | |
| Mackin street (Brighton)..... | Western avenue to Waverly street. Bitulithic. Laid by A. H. Archer..... | 292 | 656 | 1915 | Nov. 26, 1920. |
| Magazine street (Roxbury)..... | At Dudley street. Brick block. Laid by James Doherty..... | 10 | 30 | 1910 | |
| Main street (Charlestown)..... | Boston & Maine Railroad to Somerville line. Haesam pavement. Laid by Simpson Brothers Corporation. | 139 | 672 | 1906 | |
| Maitland street (Roxbury)..... | Beacon street to Boston & Albany Railroad. Brick block. Laid by Fred S. & A. D. Gore Corporation. | 186 | 537 | 1912 | Dec. 17, 1917. |
| Malcolm street (city proper)..... | Piuckney street to Mt. Vernon street. Wood block. Laid by Fred S. & A. D. Gore Corporation. | 312 | 244 | 1912 | Sept. 6, 1917. |
| Malcolm street (city proper)..... | 54 feet south of Mt. Vernon street to 8 feet north of Chestnut street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 200 | 150 | 1892 | |
| Malden street (city proper)..... | Washington street to Harrison avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 519 | 1,501 | 1902 | |
| Mall street (Roxbury)..... | At Dearborn street. Acme asphalt. Laid by Warren Brothers Company..... Brick block gutters. Laid by Warren Brothers Company..... | 10 { | 34 5 | 1916 1916 | 1922 1922. |
| Market street (Brighton)..... | At Washington street. Bitulithic. Laid by Warren Brothers Company..... Wood block (grows to street car rails). Laid by Warren Brothers Company. | 3 { | 41 1 | 1913 1913 | Oct. 24, 1918. Oct. 24, 1918. |
| Marlborough street (city proper)..... | Arlington street to 15 feet west of Arlington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 15 | 60 | 1901 | |
| Marlborough street (city proper)..... | 15 feet west of Arlington street to 10 feet east of Clarendon street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 1,226 | 4,904 | 1901 | |
| Marlborough street (city proper)..... | 10 feet east of Clarendon street to Clarendon street. Bitulithic. Laid by Warren Brothers Company. | 10 | 40 | 1905 | |
| Marlborough street (city proper)..... | Clarendon street to Dartmouth street. Bitulithic (macadam base). Laid by James Doherty. | 575 | 2,300 | 1914 | Aug. 3, 1919. |

List of Streets Having a Smooth Pavement — Continued.

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|---------------------------------------|--|--------------------|---------------------------|---------------|----------------------|
| Marlborough street (city proper)..... | Dartmouth street, across Exeter street. Bitulithic (macadam base). Laid by James Doherty. | 591 | 2,359 | 1914 | Aug. 3, 1919. |
| Marlborough street (city proper)..... | Exeter street, across Fairfield street. Bitulithic (macadam base). Laid by James Doherty. | 660 | 2,616 | 1914 | Aug. 3, 1919. |
| Marlborough street (city proper)..... | Fairfield street, across Gloucester street. Bitulithic (macadam base). Laid by James Doherty. | 562 | 2,248 | 1914 | Aug. 3, 1919. |
| Marlborough street (city proper)..... | Gloucester street, across Hereford street. Bitulithic (macadam base). Laid by James Doherty. | 435 | 1,740 | 1914 | Aug. 3, 1919. |
| Marlborough street (city proper)..... | Hereford street to Massachusetts avenue. Bitulithic (macadam base). Laid by James Doherty. | 665 | 2,660 | 1914 | Aug. 3, 1919. |
| Marlborough street (Roxbury)..... | Massachusetts avenue to 3 feet west. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 3 | 16 | 1901 | |
| Marlborough street (Roxbury)..... | 11 feet west of Massachusetts avenue to Charlesgate East. Bitulithic (macadam base). Laid by James Doherty. | 640 | 2,418 | 1914 | Aug. 3, 1919. |
| Marvin street (Roxbury)..... | Shawmut avenue to Washington street. Wood block. Laid by Boston Paving Company. | 256 | 573 | 1913 | Oct. 22, 1918. |
| Mason street (city proper)..... | West street to 6 feet south of West street. Wood block. Laid by United States Wood Preserving Company. | 6 | 14 | 1908 | Sept. 19, 1918. |
| Mason street (city proper)..... | 6 feet south of West street to 213 feet south of West street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 209 | 459 | 1901 | |
| Mason street (city proper)..... | 213 feet south of West street to 449 feet south of West street. Bitulithic. Laid by Warren Brothers Company. | 236 | 480 | 1907 | June 1, 1917. |
| Mason street (city proper)..... | 449 feet south of West street to 73 feet north of Avery street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 96 | 200 | 1909 | |
| Mason street (city proper)..... | 73 feet north of Avery street to 63 feet north of Avery street. Bayneel rock asphalt. Laid by Jones & Meehan. | 10 | 23 | 1899 | |

| Mason street (city proper)..... | 63 feet north of Avery street to Avery street. Bitulithic. Laid by Coleman Brothers. | 63 | 169 | 1914 | Nov. 6, 1919. |
|---|---|-------|----------------|--------------|----------------|
| Mason street (city proper)..... | Angle 53 feet north of Avery street to 12 feet east of Tremont street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 73 | 175 | 1900 | |
| Mason street (city proper)..... | 12 feet east of Tremont street to Tremont street. Wood block. Laid by Coleman Brothers. | 12 | 31 | 1915 | June 20, 1920. |
| Massachusetts avenue (city proper)..... | Albany street to 2 feet east of Harrison avenue. (North roadway.) Wood block. Laid by Fred S. & A. D. Gore Corporation. (South roadway.) Sicilian rock asphalt. Laid by Boston Asphalt Company. | 622 { | 1,899 1,896 | 1912 1894 | July 20, 1917. |
| Massachusetts avenue (city proper)..... | 2 feet east of Harrison avenue to Harrison avenue (south roadway). Bitulithic. Laid by Warren Brothers Company. | 2 | 16 | 1905 | |
| Massachusetts avenue (city proper)..... | Harrison avenue to 3 feet west of Harrison avenue. Bitulithic. Laid by Warren Brothers Company. | 3 | 25 | 1905 | |
| Massachusetts avenue (city proper)..... | 3 feet west of Harrison avenue to Washington street. (North roadway.) Wood block. Laid by Fred S. & A. D. Gore Corporation. (South roadway.) Sicilian rock asphalt. Laid by Boston Asphalt Company. | 670 { | 2,009 1,974 | 1912 1894 | July 20, 1917. |
| Massachusetts avenue (city proper)..... | Washington street to Shawmut avenue. (North roadway.) Wood block. Laid by Fred S. & A. D. Gore Corporation. (South roadway.) Acme asphalt. Laid by Warren Brothers Company. | 341 { | 1,003 1,008 | 1912 1910 | July 20, 1917. |
| Massachusetts avenue (city proper)..... | Shawmut avenue to Tremont street. (North roadway.) Wood block. Laid by Fred S. & A. D. Gore Corporation. (South roadway.) Acme asphalt. Laid by Warren Brothers Company. | 921 { | 2,889 2,946 | 1912 1910 | July 20, 1917. |
| Massachusetts avenue (city proper)..... | Tremont street to 13 feet east of Columbus avenue. (North roadway.) Bitulithic. Laid by Warren Brothers Company. (South roadway.) Acme asphalt. Laid by Warren Brothers Company. | 519 { | 1,606 1,584 | 1907 1910 | June 13, 1917 |
| Massachusetts avenue (city proper)..... | 13 feet east of Columbus avenue to Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 13 | 106 | 1906-07 | |
| Massachusetts avenue (city proper)..... | Columbus avenue to Providence Division New York, New Haven & Hartford Railroad. Bitulithic. Laid by Warren Brothers Company. | 469 | 2,248 | 1903-06 | |
| Massachusetts avenue (Roxbury)..... | Providence Division, New York, New Haven & Hartford Railroad, to Huntington avenue. Bitulithic. Laid by Warren Brothers Company. | 551 | 2,100 | 1903-06 | |

List of Streets Having a Smooth Pavement — *Continued.*

| Streets. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|---|--|--------------------|---------------------------|---------------|----------------------|
| Massachusetts avenue (Roxbury)..... | Huntington avenue, across Boylston street. Laid by Boston Asphalt Company. | 1,778 | 8,506 | 1901 | |
| Massachusetts avenue (Roxbury)..... | Boylston street to bridge over Boston & Albany Railroad. Acme asphalt. Laid by Warren Brothers Company. | 99 { | 440 | 1909 | |
| | Sicilian rock asphalt. Laid by Boston Asphalt Company. | | 12 | 1901 | |
| Massachusetts avenue (Roxbury)..... | Bridge over Boston & Albany Railroad. Wood block. Laid by Coleman Brothers. | 75 | 500 | 1908 | |
| Massachusetts avenue (Roxbury)..... | Bridge over Boston & Albany Railroad to 47 feet north of Newbury street. Trinidad asphalt. Laid by James Doherty. | 175 | 767 | 1914 | Nov. 14, 1919. |
| Massachusetts avenue (Roxbury)..... | 47 feet north of Newbury street to 27 feet south of Marlborough street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 656 | 3,301 | 1901 | |
| Massachusetts avenue (city proper)..... | 27 feet south of Marlborough street to Beacon street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 326 | 1,557 | 1901 | |
| Massachusetts avenue (city proper)..... | Southerly side Beacon street to Harvard Bridge. Bitulithic. Laid by Warren Brothers Company. | 237 | 1,080 | 1902 | |
| Maverick street (East Boston)..... | 7 feet west of London street to 7 feet east of Havre street. Bitulithic. Laid by Warren Brothers Company. | 162 | 558 | 1903 | |
| Maverick street (East Boston)..... | Bridge over Boston & Albany Railroad. Trinidad asphalt. Laid by E. R. Taylor Company. | 38 { | 59 | 1908-07 | |
| | Brick (in street car tracks). | | 72 | 1906 | |
| Mayhew street (Dorchester)..... | Roseclair street to Boston street. Trinidad asphalt. Laid by Charles J. Jacobs Company. | 846 | 2,461 | 1915 | July 19, 1920. |
| Mayo street (city proper)..... | 7 feet south of Castle street to Cobb street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 244 | 408 | 1897 | |
| McLean street (city proper)..... | Chambers street to 8 feet east of Blossom street. Bitulithic. Laid by Warren Brothers Company. | 510 | 1,307 | 1905 | |

| | | | | |
|--------------------------------------|-------|-------|------|---|
| Meander street (city proper)..... | 202 | 416 | 1896 | 7 feet east of East Dedham street to 8 feet west of Malden street. Sicilian rock asphalt. Laid by Boston Asphalt Company. |
| Meander street (city proper)..... | 8 | 11 | 1902 | 8 feet west of Malden street to Malden street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. |
| Melrose street (city proper)..... | 7 | 19 | 1913 | Pleasant street to 7 feet west of Pleasant street. Wood block. Laid by Coleman Brothers. |
| Melrose street (city proper)..... | 737 | 1,885 | 1911 | 7 feet west of Pleasant street to Ferdinand street. Wood block. Laid by Fred S. & A. D. Gore Corporation. |
| Melville avenue (Dorchester)..... | 10 | 40 | 1913 | At Washington street. Wood block. Laid by William J. Barry..... |
| Melvinside terrace (Dorchester)..... | 193 | 404 | 1915 | Dorchester avenue to Minton street. Bitulithic. Laid by James Doherty.. |
| Mercer street (South Boston)..... | 4 | 16 | 1905 | At Dorchester street. Bitulithic. Laid by Warren Brothers Company..... |
| Meridian street (East Boston)..... | 221 | 540 | 1900 | 24 feet north of Trenton street to 9 feet east of Eutaw street. Sicilian rock asphalt. Laid by Jones & Meehan. |
| Milk street (city proper)..... | 300 | 1,156 | 1910 | 20 feet west of east side of Pearl street, across Oliver street. Wood block. Laid by James Doherty. |
| Milk street (city proper)..... | 279 | 1,045 | 1911 | Oliver street to 8 feet west of Broad street. Wood block. Laid by James Doherty. |
| Miller street (Charlestown)..... | 195 | 367 | 1901 | Main street to Lawrence street. Sicilian rock asphalt. Laid by Jones & Meehan. |
| Millet street (Dorchester)..... | 26 | 135 | 1911 | Each side of Talbot avenue. Brick block. Laid by James Doherty..... |
| Milton avenue (Dorchester)..... | 18 | 123 | 1914 | Each side of Norfolk street. Bitulithic. Laid by James Doherty..... |
| Milton street (city proper)..... | 2 | 3 | 1895 | Spring street to 2 feet north of Spring street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. |
| Milton street (city proper)..... | 306 | 271 | 1899 | 2 feet north of Spring street to Brighton street. Seyssel rock asphalt. Laid by Jones & Meehan. |
| Mindora street (Roxbury)..... | 1 | 3 | 1914 | At Station street. Bitulithic. Laid by John F. Beatty..... |
| Montebello road (West Roxbury)..... | 1,077 | 3,051 | 1916 | Forest Hills street to Walnut avenue. Bitulithic. Laid by Martino De Matteo. |

Dec. 13, 1918.

Oct. 21, 1918.
June 23, 1920.

July 11, 1919.

Dec. 18, 1919.

July 21, 1921.

List of Streets Having a Smooth Pavement — *Continued.*

| Streets. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|--------------------------------------|--|--------------------|---------------------------|---------------|----------------------|
| Montgomery street (city proper)..... | Each side of Clarendon street. Bitulithic. Laid by Warren Brothers Company. | 5 | 29 | 1914 | Sept. 25, 1919. |
| Montgomery street (city proper)..... | At West Canton street. Acme asphalt (macadam base). Laid by Warren Brothers Company. | 3 | 15 | 1916 | Oct. 21, 1921. |
| Moon street (city proper)..... | North square to 5 feet east of North square. Bitulithic. Laid by Warren Brothers Company. | 5 | 11 | 1906 | |
| Moon street (city proper)..... | 5 feet east of North square to 6 feet west of Lewis street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 161 | 295 | 1891 | |
| Moon street (city proper)..... | 6 feet west of Lewis street to 7 feet east of Fleet street. Bitulithic. Laid by Warren Brothers Company. | 100 | 188 | 1906 | |
| Morse street (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 10 | 30 | 1912 | Oct. 21, 1918. |
| Morton street (city proper)..... | Salem street to 51 feet east of Endicott street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 274 | 213 | 1901 | |
| Morton street (city proper)..... | 51 feet east of Endicott street to 6 feet east of Endicott street. Standard asphalt. Laid by Central Construction Company. | 45 | 35 | 1916 | |
| Motley street (Roxbury)..... | At Columbus avenue. Bermudes asphalt. Laid by Boston Asphalt Company. | 9 | 21 | 1906 | |
| Motte street (city proper)..... | Washington street to Harrison avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 321 | 606 | 1892-99 | |
| Moulton street (Charlestown)..... | Easterly side of Corey street to Vine street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 81 | 243 | 1897 | |
| Moulton street (Charlestown)..... | Vine street to 8 feet east of Bunker Hill street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 113 | 343 | 1897 | |
| Moultrie street (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 8 | 24 | 1913 | Oct. 21, 1918. |

| | | | | |
|---|---|-----|-------|------|
| Mt. Ida road (Dorchester)..... | At Bowdoin street. Wood block. Laid by James Doherty..... | 11 | 67 | 1909 |
| Mt. Pleasant avenue (Roxbury)..... | Each side of Dudley street. Brick block. Laid by James Doherty..... | 21 | 73 | 1910 |
| Mt. Vernon street (city proper)..... | Archway under State House. Limner rock and acme asphalt mixed. Laid by Forrer & Pearl. | 164 | 455 | 1911 |
| Mt. Vernon street (city proper)..... | State House to Joy street. Brick..... | 263 | 776 | 1901 |
| Mystic avenue (Charlestown)..... | East side of bridge over Boston & Maine Railroad to Somerville line. Brick. | 187 | 756 | 1910 |
| Mystic street (city proper)..... | Malden street to 7 feet west of Malden street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 7 | 6 | 1902 |
| Mystic street (city proper)..... | 7 feet west of Malden street to 7 feet east of East Dedham street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 190 | 209 | 1896 |
| Mystic street (city proper)..... | East Dedham street to East Canton street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 202 | 315 | 1896 |
| Mystic street (city proper)..... | East Canton street to East Brookline street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 202 | 315 | 1896 |
| Nashua street (city proper)..... | At post office. Wood block. Laid by city forces..... | 17 | 72 | 1916 |
| Nassau street (city proper)..... | At Ash street. Acme asphalt. Laid by Warren Brothers Company..... | 7 | 15 | 1909 |
| Nelson street (Dorchester)..... | At Norfolk street. Bitulithic. Laid by James Doherty..... | 15 | 71 | 1914 |
| Newbury street (city proper)..... | At Arlington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 4 | 16 | 1901 |
| Newbury street (city proper)..... | Each side of Berkeley street. Bitulithic. Laid by Warren Brothers Company. | 4 | 18 | 1903 |
| Newbury street (city proper)..... | Clarendon street to 4 feet west of Clarendon street. Bitulithic. Laid by Warren Brothers Company. | 4 | 17 | 1905 |
| Newbury street (city proper)..... | Each side of Dartmouth street. Bitulithic. Laid by Warren Brothers Company. | 9 | 38 | 1903 |
| Newbury street (city proper and Roxbury)..... | Fairfield street to 8 feet east of Hereford street. Wood block. Laid by United States Wood Preserving Company. | 940 | 3,760 | 1901 |

July 11, 1919.

List of Streets Having a Smooth Pavement — *Continued.*

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|--------------------------------------|--|--------------------|---------------------------|---------------|----------------------|
| Newbury street (Roxbury)..... | 8 feet east of Hereford street to 148 feet east of Massachusetts avenue. Wood block. Laid by Patrick McGovern. | 565 | 2,327 | 1903 | |
| Newbury street (Roxbury)..... | 148 feet east of Massachusetts avenue to 15 feet east of Massachusetts avenue. Wood block. Laid by James Doherty. | 133 | 465 | 1914 | Nov. 14, 1919. |
| Newbury street (Roxbury)..... | 15 feet east of Massachusetts avenue to Massachusetts avenue. Trinidad asphalt. Laid by James Doherty. | 15 | 65 | 1914 | Nov. 14, 1919. |
| Newbury street (Roxbury)..... | Massachusetts avenue to 16 feet west of Massachusetts avenue. Trinidad asphalt. Laid by James Doherty. | 16 | 55 | 1914 | Nov. 14, 1919. |
| Newland street (city proper)..... | West Brookline street to Pembroke street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 158 | 228 | 1902 | |
| Newland street (city proper)..... | Pembroke street to West Newton street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 155 | 224 | 1902 | |
| Nightingale street (Dorchester)..... | At Talbot avenue. Brick block. Laid by James Doherty..... | 13 | 81 | 1911 | |
| Norfolk street (Dorchester)..... | Washington street to 8 feet south of Washington street. Wood block. Laid by William J. Barry. | 6 | 75 | 1913 | Oct. 21, 1918. |
| Norfolk street (Dorchester)..... | 78 feet west of Talbot avenue to 57 feet east of Edison street. Bitulthic. Laid by James Doherty..... | 1,795 { | 6,550 | 1913 | July 11, 1919. |
| Norfolk street (Dorchester)..... | Wood block. (Brows to street car rails.) Laid by James Doherty..... | | 638 | 1913 | July 11, 1919. |
| Norfolk street (Dorchester)..... | 57 feet east of Edison street to bridge over New York, New Haven & Hartford Railroad, Midland Division. | 2,352 { | 8,222 | 1914 | July 11, 1919. |
| Norfolk street (Dorchester)..... | Wood block. (Brows to street car rails.) Laid by James Doherty..... | | 671 | 1914 | July 11, 1919. |
| Norman street (city proper)..... | 7 feet north of Green street to South Margin street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 391 | 697 | 1905 | |
| Normandy street (Dorchester)..... | North side Intervale street to Devon street. Astec asphalt. Laid by Cen- tral Construction Company. | 485 | 1,403 | 1916 | Oct. 13, 1921. |

| | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 |
|--|------|------|------|------|------|----------------|
| Normandy street (Dorchester)..... | | | 488 | | | Oct. 22, 1920. |
| North square (city proper)..... | | | 235 | | | |
| North Anderson street (city proper)..... | | | | | | |
| North Anderson street (city proper)..... | | | | | | |
| Northampton street (city proper)..... | | | | | | |
| Northampton street (city proper)..... | | | | | | |
| Northampton street (city proper)..... | | | | | | |
| North Bennet street (city proper)..... | | | | | | |
| North Harvard street (Brighton)..... | | | | | | |
| North Margin street (city proper)..... | | | | | | |
| North Margin street (city proper)..... | | | | | | |
| Norway street (Roxbury)..... | | | | | | |
| Norway street (Roxbury)..... | | | | | | |
| Norway street (Roxbury)..... | | | | | | |
| Norwell street (Dorchester)..... | | | | | | |

List of Streets Having a Smooth Pavement — *Continued.*

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|---------------------------------------|---|--------------------|---------------------------|---------------|----------------------|
| Norwich street (city proper)..... | Mystic street to Meander street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 221 | 339 | 1896 | |
| Oakwood street (Dorchester)..... | At Norfolk street. Bitulithic. Laid by James Doherty..... | 1 | 4 | 1913 | July 11, 1919. |
| Ohio street (city proper)..... | Washington street to Shawmut avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 329 | 264 | 1896 | |
| Old Harbor street (South Boston)..... | At Dorchester street. Bitulithic. Laid by Warren Brothers Company..... | 5 | 17 | 1905 | |
| Oliver street (city proper)..... | Milk street to 152 feet southerly. Wood block. Laid by James Doherty.. | 152 | 591 | 1910 | |
| Olney street (Dorchester)..... | At Geneva avenue. Brick block. Laid by Central Construction Company, | 32 | 204 | 1911 | |
| Onida street (city proper)..... | Harrison avenue to Albany street. Bitulithic. Laid by Warren Brothers Company. | 495 | 1,045 | 1903 | |
| Orchard street (Roxbury)..... | At Euatis street. Bitulithic. Laid by John F. Beatty..... | 1 | 4 | 1914 | Sept. 4, 1919. |
| Orchardfield street (Dorchester)..... | Freeport street to Dorchester avenue. Astec asphalt. Laid by Central Construction Company. | 314 | 1,266 | 1916 | Dec. 7, 1921. |
| Oswego street (city proper)..... | Harrison avenue to 3 feet east of Harrison avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 3 | 7 | 1901 | |
| Oswego street (city proper)..... | 3 feet east of Harrison avenue to Albany street. Seyssel rock asphalt. Laid by Jones & Meehan. | 502 | 1,058 | 1899 | |
| Otis street (city proper)..... | At Summer street. Wood block. Laid by Northern Construction Company, | 8 | 29 | 1915 | Aug. 16, 1920. |
| Oxford street (city proper)..... | 8 feet north of Beach street to 7 feet south of Essex street (macadam base). Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 415 | 700 | 1895 | |
| Paley park (Dorchester)..... | At Upland avenue. Astec asphalt. Laid by Central Construction Com- pany. | 15 | 53 | 1916 | Nov. 28, 1921. |

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|-------------------------------------|--|------------|------------|--------------|----------------------------------|
| Palmer street (Roxbury)..... | 121 feet east of Winslow street to 203 feet west of Eustis street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 132 | 203 | 1906 | |
| Park square (city proper)..... | Boylston street to 100 feet south of Boylston street. Wood block. Laid by United States Wood Preserving Company. | { 100 2 | 715 296 | 1914 1915 | Nov. 30, 1917. Nov. 30, 1917. |
| Park square (city proper)..... | 100 feet south of Boylston street, across Elliot street. Wood block. Laid by United States Wood Preserving Company. | 332 | 2,797 | 1907 | Nov. 30, 1917. |
| Park square (city proper)..... | At Providence street. Wood block. Laid by Fred S. & A. D. Gore Corporation. | ..... | 325 | 1912 | Nov. 20, 1917. |
| Park street (city proper)..... | At Tremont street. Wood block. Laid by Coleman Brothers..... | 7 | 59 | 1915 | June 20, 1920. |
| Park street (Dorchester)..... | Each side of Washington street. Wood block. Laid by William J. Barry.. | 20 | 80 | 1913 | Oct. 21, 1918. |
| Parker street (Roxbury)..... | 10 feet north of Edgar street to 8 feet south of Caldwell street. Bitulithio. Granite block base. Laid by Warren Brothers Company. | 218 | 837 | 1912 | Sept. 10, 1917. |
| Parker street (Roxbury)..... | 8 feet south of Caldwell street to 6 feet north of Ward street. Standard asphalt (granite block base). Laid by Central Construction Company. | 457 | 1,767 | 1916 | |
| Parkman street (city proper)..... | North Grove street to 7 feet east of North Anderson street. Acme asphalt. Laid by Warren Brothers Company..... | { 200 { | 361 96 | 1916 1916 | Nov. 26, 1921. Nov. 26, 1921. |
| Parkman street (city proper)..... | Brick block gutters. Laid by Warren Brothers Company..... | 224 | 534 | 1898 | |
| Parkman street (city proper)..... | 7 feet east of North Anderson street, across Blossom street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 230 | 479 | 1910 | |
| Parkman street (city proper)..... | Blossom street to North Russell street. Acme asphalt. Laid by Warren Brothers Company. | | | | |
| Parkton road (West Roxbury)..... | Perkins street to 369 feet north of Perkins street. Concrete road. Laid by city forces. | 800 | 1,970 | 1916 | |
| Parmenter street (city proper)..... | Hanover street to 5 feet east of Salem street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 274 | 749 | 1902 | |
| Parmenter street (city proper)..... | 5 feet east of Salem street to Salem street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 5 | 15 | 1901 | |
| Parnell street (city proper)..... | Lenox street to Sawyer street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 250 | 348 | 1902 | |

List of Streets Having a Smooth Pavement — Continued.

| Stanza. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|-------------------------------------|--|--------------------|---------------------------|---------------|----------------------|
| Paul street (city proper)..... | Emerald street to 1 foot west of Emerald street. Bitulithic. Laid by Warren Brothers Company. | 1 | 2 | 1904 | |
| Paul street (city proper)..... | Emerald street to Tremont street, minus intersections at Village and Albion streets. Seyssel rock asphalt. Laid by Jones & Meehan. | 268 | 635 | 1897 | |
| Peacevale road (Dorchester)..... | Norfolk street to 1 foot south of Norfolk street. Bitulithic. Laid by James Doherty. | 1 | 4 | 1914 | July 11, 1919. |
| Peacevale road (Dorchester)..... | 1 foot south of Norfolk street to 7 feet north of Dunbar avenue. Trinidad asphalt. Laid by D. M. Biggs & Co. | 891 | 2,315 | 1915 | Oct. 14, 1920. |
| Pearl street (city proper)..... | Milk street to 153 feet south of Milk street. Wood block. Laid by James Doherty. | 153 | 568 | 1910 | |
| Pelham street (city proper)..... | Washington street to Shawmut avenue. Seyssel rock asphalt. Laid by Jones & Meehan. | 303 | 655 | 1897 | |
| Pemberton square (city proper)..... | Front of Suffolk County Courthouse. Sialian rock asphalt. Laid by Boston Asphalt Company. | 323 | 1,365 | 1894 | |
| Pembroke street (city proper)..... | At Columbus square. Bitulithic. Laid by Fred S. & A. D. Gore Corporation. | 4 | 17 | 1912 | Aug. 2, 1917. |
| Perth street (Dorchester)..... | Quincy street to Fayston street. Bitulithic. Laid by James Doherty..... | 218 | 630 | 1915 | June 23, 1920. |
| Piedmont street (city proper)..... | At Pleasant street. Wood block. Laid by Coleman Brothers..... | 11 | 26 | 1913 | Dec. 13, 1918. |
| Pinckney street (city proper)..... | 7 feet west of Charles street, across Britomer street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 264 | 708 | 1895 | |
| Pine street (city proper)..... | Washington street to Harrison avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 403 | 567 | 1896 | |
| Pleasant street (city proper)..... | Washington street to Shawmut avenue. Wood block. Laid by Coleman Brothers. | 408 | 1,917 | 1913 | Dec. 13, 1918. |

PUBLIC WORKS DEPARTMENT.

371

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|--------------------------------------|--|-------|-------|------|----------------|
| Pleasant street (city proper)..... | Bridge over Boston Elevated Railway. Wood block. Laid by Coleman Brothers. | 55 | 244 | 1913 | Dec. 13, 1913. |
| Pleasant street (city proper)..... | Tremont street to Eliot street. Wood block. Laid by Coleman Brothers.. | 964 | 4,405 | 1913 | Dec. 13, 1913. |
| Pleasant street (city proper)..... | Eliot street to Park square. Wood block. Laid by United States Wood Preserving Company. | 93 | 425 | 1907 | Nov. 30, 1917. |
| Pleasant street (Dorchester)..... | Hancock street to 84 feet north of Hancock street. Brick block. Laid by Fred S. & A. D. Gore Corporation. | 84 | 1,112 | 1911 | |
| Poplar street (city proper)..... | Chambers street, across Spring street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 615 | 1,250 | 1892 | |
| Poplar street (city proper)..... | Spring street to 3 feet south of Charles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 572 | 1,175 | 1887 | |
| Porter street (city proper)..... | Bridge over Boston Elevated Railway. Wood block. Laid by Coleman Brothers. | 11 | 18 | 1913 | Dec. 13, 1913. |
| Porter street (East Boston)..... | Bridge over Boston & Albany Railroad. Acme asphalt. Laid by W. A. Murfieldt Company. | 37 | 128 | 1907 | Oct. 19, 1917. |
| Powellton road (Dorchester)..... | Columbia road to Glenarm street. Bitulithic. Laid by James Doherty.... | 329 | 950 | 1915 | June 19, 1920. |
| Prescott street (East Boston)..... | Bridge over Boston & Albany Railroad. Acme asphalt. Laid by W. A. Murfieldt Company. | 36 | 125 | 1907 | Oct. 19, 1917. |
| Prince street (West Roxbury)..... | Arborway at Centre street to Pond street. Trinidad asphalt. Laid by Charles J. Jacobs Company. | 1,379 | 4,079 | 1915 | Nov. 22, 1920. |
| Prince street (city proper)..... | Garden Court street to Hanover street. Bitulithic. Laid by Warren Brothers Company. | 134 | 223 | 1906 | |
| Prince street (city proper)..... | 9 feet west of Hanover street to 293 feet west of Hanover street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 284 | 634 | 1895 | |
| Prince street (city proper)..... | 293 feet west of Hanover street to 15 feet east of Salem street. Sicilian rock asphalt. Laid by Jones & Meehan. | 198 | 457 | 1900 | |
| Prince street (city proper)..... | 15 feet east of Salem street to Salem street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 15 | 40 | 1901 | |
| Providence street (city proper)..... | Park square to 75 feet east of Church street. Wood block. Laid by Fred S. & A. D. Gore Corporation. | 161 | 1,400 | 1912 | Nov. 20, 1917. |

List of Streets Having a Smooth Pavement — *Continued.*

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|---|---|--------------------|---------------------------|---------------|----------------------|
| Public Alley No. 12 (city proper)..... | Poplar street to Public Alley No. 14. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 77 | 68 | 1903 | |
| Public Alley No. 102 (city proper)..... | 23 feet south of Marshall street to Creek square. Seyssel rock asphalt. Laid by Jones & Meehan. | 182 | 184 | 1899 | |
| Public Alley No. 301 (city proper)..... | Pinckney street to River street. Trinidad asphalt. Laid by Simpson Brothers Corporation. | 270 | 400 | 1897 | |
| Public Alley No. 401 (city proper)..... | Between Huntington avenue and St. Botolph street, from 96 feet west of Irvington street to 60 feet east of Garrison street. Trinidad asphalt. Laid by Simpson Brothers Corporation. | 350 | 362 | 1899 | |
| Public Alley No. 402 (city proper)..... | Between Huntington avenue and St. Botolph street, from 67 feet west of Garrison street to 77 feet east of West Newton street. Trinidad asphalt. Laid by Simpson Brothers Corporation. | 358 | 374 | 1899 | |
| Public Alley No. 403 (city proper)..... | Between Huntington avenue and St. Botolph street, from 65 feet west of West Newton street to 62 feet east of Cumberland street. Trinidad asphalt. Laid by Simpson Brothers Corporation. | 355 | 370 | 1899 | |
| Public Alley No. 404 (Roxbury)..... | Between Huntington avenue and St. Botolph street, from 66 feet south of Cumberland street to Public Alley No. 405. Trinidad asphalt. Laid by Simpson Brothers Corporation. | 534 | 533 | 1899 | |
| Public Alley No. 405 (Roxbury)..... | Rear of northeast side of Massachusetts avenue, from 94 feet east of Huntington avenue to 62 feet west of St. Botolph street. Trinidad asphalt. Laid by Simpson Brothers Corporation. | 100 | 89 | 1899 | |
| Public Alley No. 414 (city proper)..... | Between Beacon street and Marlborough street, from 53 feet east of Massachusetts avenue to Herford street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 609 | 569 | 1901 | |
| Public Alley No. 415 (city proper)..... | Between Beacon street and Marlborough street, from Herford street to Gloucester street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 394 | 378 | 1901 | |

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|---|---|-----|-----|------|
| Public Alley No. 416 (city proper)..... | Between Beacon street and Marlborough street, from Gloucester street to Fairfield street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 520 | 490 | 1901 |
| Public Alley No. 417 (city proper)..... | Between Beacon street and Marlborough street, from Fairfield street to Exeter street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 620 | 579 | 1901 |
| Public Alley No. 418 (city proper)..... | At Dartmouth street. Bitulithic. Laid by Warren Brothers Company..... | 4 | 4 | 1903 |
| Public Alley No. 419 (city proper)..... | Dartmouth street to 4 feet east of Dartmouth street. Bitulithic. Laid by Warren Brothers Company. | 4 | 4 | 1903 |
| Public Alley No. 419 (city proper)..... | Between Beacon street and Marlborough street, from 4 feet east of Dartmouth street to 12 feet west of Clarendon street. Trinidad asphalt. Laid by Simpson Brothers Corporation. | 550 | 488 | 1899 |
| Public Alley No. 419 (city proper)..... | 12 feet west of Clarendon street to Clarendon street. Bitulithic. Laid by Warren Brothers Company. | 12 | 11 | 1905 |
| Public Alley No. 420 (city proper)..... | Clarendon street to 10 feet east of Clarendon street. Bitulithic. Laid by Warren Brothers Company. | 10 | 9 | 1905 |
| Public Alley No. 420 (city proper)..... | Between Beacon street and Marlborough street, from 10 feet east of Clarendon street to Berkeley street. Trinidad asphalt. Laid by Simpson Brothers Corporation. | 561 | 498 | 1897 |
| Public Alley No. 421 (city proper)..... | 15 feet west of Arlington street to 3 feet west of Arlington street. Brick. | 12 | 11 | |
| Public Alley No. 421 (city proper)..... | 3 feet west of Arlington street to Arlington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 3 | 3 | 1901 |
| Public Alley No. 422 (city proper)..... | Between Commonwealth avenue and Marlborough street, from Arlington street to Berkeley street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 620 | 579 | 1902 |
| Public Alley No. 423 (city proper)..... | Between Commonwealth avenue and Marlborough street, from Berkeley street to 3 feet east of Clarendon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 574 | 538 | 1902 |
| Public Alley No. 423 (city proper)..... | 3 feet east of Clarendon street to Clarendon street. Bitulithic. Laid by Warren Brothers Company. | 3 | 3 | 1905 |
| Public Alley No. 424 (city proper)..... | Clarendon street to 3 feet west of Clarendon street. Bitulithic. Laid by Warren Brothers Company. | 3 | 3 | 1905 |

List of Streets Having a Smooth Pavement — Continued.

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|---|--|--------------------|---------------------------|---------------|----------------------|
| Public Alley No. 424 (city proper) | Between Commonwealth avenue and Marlborough street, from 3 feet west of Clarendon street to 3 feet east of Dartmouth street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 549 | 487 | 1902 | |
| Public Alley No. 424 (city proper) | 3 feet east of Dartmouth street to Dartmouth street. Bitulithic. Laid by Warren Brothers Company. | 3 | 3 | 1903 | |
| Public Alley No. 425 (city proper) | Dartmouth street to 8 feet west of Dartmouth street. Bitulithic. Laid by Warren Brothers Company. | 8 | 7 | 1903 | |
| Public Alley No. 425 (city proper) | Between Commonwealth avenue and Marlborough street, from 8 feet west of Dartmouth street to 9 feet east of Exeter street. Trinidad asphalt. Laid by Simpson Brothers Corporation. | 543 | 478 | 1899 | |
| Public Alley No. 426 (city proper) | Between Commonwealth avenue and Marlborough street, from Exeter street to Fairfield street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 620 | 591 | 1901 | |
| Public Alley No. 428 (city proper and Roxbury) .. | Between Commonwealth avenue and Marlborough street, from Gloucester street to Hereford street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 382 | 376 | 1901 | |
| Public Alley No. 429 (Roxbury) | Between Commonwealth avenue and Marlborough street, from 55 feet west of Hereford street to 77 feet east of Massachusetts avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 530- | 501 | 1901 | |
| Public Alley No. 429 (Roxbury) | At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 5 | 4 | 1901 | |
| Public Alley No. 430 (Roxbury) | At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 7 | 6 | 1901 | |
| Public Alley No. 431 (city proper and Roxbury) .. | Between Commonwealth avenue and Newbury street, from 7 feet east of Hereford street to 83 feet west of Gloucester street. Trinidad asphalt. Laid by Simpson Brothers Corporation. | 305 | 271 | 1899 | |
| Public Alley No. 434 (city proper) | Between Commonwealth avenue and Newbury street, from Exeter street to 3 feet west of Dartmouth street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 550 | 478 | 1901 | |

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|---|--|-----|-----|--------------------|
| Public Alley No. 434 (city proper)..... | 3 feet west of Dartmouth street to Dartmouth street. Bitulithic. Laid by Warren Brothers Company. | 3 | 3 | 1903 |
| Public Alley No. 435 (city proper)..... | At Dartmouth street. Bitulithic. Laid by Warren Brothers Company..... | 3 | 3 | 1903 |
| Public Alley No. 435 (city proper)..... | At Clarendon street. Bitulithic. Laid by Warren Brothers Company..... | 4 | 4 | 1905 |
| Public Alley No. 436 (city proper)..... | Clarendon street to 15 feet east of Clarendon street. Bitulithic. Laid by Warren Brothers Company. | 15 | 13 | 1905 |
| Public Alley No. 436 (city proper)..... | Between Commonwealth avenue and Newbury street, from 15 feet east of Clarendon street to Berkeley street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 563 | 528 | 1901 |
| Public Alley No. 437 (city proper)..... | Between Commonwealth avenue and Newbury street, from Berkeley street to Arlington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 628 | 558 | 1898 |
| Public Alley No. 438 (city proper)..... | Arlington street to 3 feet west of Arlington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 3 | 3 | 1901 |
| Public Alley No. 438 (city proper)..... | Between Newbury street and Boylston street, from 3 feet west of Arlington street to 3 feet east of Berkeley street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 625 | 583 | 1901 |
| Public Alley No. 438 (city proper)..... | 3 feet east of Berkeley street to Berkeley street. Bitulithic. Laid by Warren Brothers Company. | 3 | 3 | 1903 |
| Public Alley No. 439 (city proper)..... | Clarendon street to 3 feet west of Clarendon street. Bitulithic. Laid by Warren Brothers Company. | 3 | 3 | 1905 |
| Public Alley No. 439 (city proper)..... | Clarendon street to Dartmouth street. Vitrified brick..... | 553 | 492 | |
| Public Alley No. 439 (city proper)..... | At Dartmouth street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 1 | 1 | 1894 |
| Public Alley No. 440 (city proper)..... | Between Newbury street and Boylston street, from Dartmouth street to 3 feet west of Dartmouth street. Bitulithic. Laid by Coleman Brothers. | 3 | 7 | 1914 Nov. 3, 1919. |
| Public Alley No. 440 (city proper)..... | Between Newbury street and Boylston street, from 3 feet west of Dartmouth street to Exeter street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 550 | 520 | 1901 |
| Public Alley No. 441 (city proper)..... | Between Newbury street and Boylston street, from Exeter street to Fairfield street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 617 | 548 | 1903 |

List of Streets Having a Smooth Pavement — *Continued.*

| Streets. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|---|--|--------------------|---------------------------|---------------|----------------------|
| Public Alley No. 442 (city proper)..... | Between Newbury street and Boylston street, from 59 feet west of Fairfield street to 110 feet east of Gloucester street. Laid by Boston Asphalt Company. | 351 | 312 | 1901 | |
| Public Alley No. 442 (city proper)..... | From 110 feet east of Gloucester street to Gloucester street. Wood block. Laid by Boston Asphalt Company. | 100 | 89 | 1901 | |
| Public Alley No. 444 (Roxbury)..... | 350 feet west of Hereford street to 532 feet west of Hereford street. Concrete road. Laid by Boston Transit Commission. | 182 | 318 | 1914-15 | |
| Public Alley No. 701 (city proper)..... | Between Union Park street and Upton street, from 130 feet east of Tremont street to Shawmut avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 521 | 611 | 1899 | |
| Public Alley No. 702 (city proper)..... | Between Shawmut avenue and Tremont street, from Worcester street to West Springfield street. Seyssel rock asphalt. Laid by Jones & Meehan. | 208 | 208 | 1899 | |
| Public Alley No. 703 (city proper)..... | 40 feet west of Newland street to 40 feet east of Public Alley No. 702. Seyssel rock asphalt. Laid by Jones & Meehan. | 118 | 103 | 1899 | |
| Public Alley No. 901 (Roxbury)..... | From 113 feet west of Hemenway street to 113 feet west of Hemenway street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 573 | 550 | 1902 | |
| Public Alley No. 905 (Roxbury)..... | At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 5 | 4 | 1901 | |
| Public Alley No. 908 (Roxbury)..... | Massachusetts avenue to Marlborough street. Brick block. Laid by Boston Construction Company. | 552 | 493 | 1915 | Oct. 9, 1920. |
| Randall street (city proper and Roxbury). | 8 feet east of Harrison avenue to 6 feet west of Fellows street. Trinidad and Astec asphalt. Laid by Central Construction Company. | 325 | 724 | 1916 | Aug. 18, 1921. |
| Randall street (Roxbury)..... | 6 feet east of Fellows street to 1 foot west of Albany street. Trinidad and Astec asphalt. Laid by Central Construction Company. | 264 | 765 | 1916 | Aug. 18, 1921. |
| Randall street (Roxbury)..... | 1 foot west of Albany street to Albany street. Bitulithic. Laid by Warren Brothers Company. | 1 | 4 | 1907 | Aug. 3, 1917. |

| | | | | | |
|-------------------------------------|--|-------|-------|---------|----------------|
| Raven street (Dorchester)..... | 6 feet south of Crescent avenue to 444 feet south of Crescent avenue. Bitulithic. Laid by James Doherty. | 438 | 1,264 | 1915 | June 22, 1920. |
| Ridgewood street (Dorchester)..... | Draper street to Topliff street. Bitulithic. Laid by James Doherty..... | 1,063 | 3,075 | 1915 | July 29, 1920. |
| Rill street (Dorchester)..... | At Hancock street. Brick block. Laid by Central Construction Company. | 10 | 29 | 1910 | |
| Ripley road (Dorchester)..... | Vassar street to Harvard street. Astec asphalt. Laid by Central Construction Company. | 673 | 1,946 | 1916 | Dec. 11, 1921. |
| River street (city proper)..... | Beacon street to Mt. Vernon street. Acme asphalt. Laid by Warren Brothers Company. | 564 | 1,220 | 1912 | July 10, 1917. |
| Rochester street (city proper)..... | Harrison avenue to Albany street. Trinidad asphalt. Laid by Central Construction Company. | 494 | 1,110 | 1914 | |
| Rogers street (South Boston)..... | Dorchester street to 21 feet south of Dorchester street. Bitulithic. Laid by Warren Brothers Company. | 21 | 28 | 1914 | Nov. 11, 1919. |
| Rogers street (South Boston)..... | 21 feet south of Dorchester street to 12 feet north of Preble street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 332 | 445 | 1891 | |
| Rosedale street (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 10 | 32 | 1913 | Oct. 21, 1918. |
| Rosewood street (Dorchester)..... | Oakland street to Randolph road. Trinidad asphalt. Laid by John Kelly Company. | 1,524 | 4,417 | 1916 | June 24, 1921. |
| Roxbury street (Roxbury)..... | Washington street to Guild row. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 170 | 895 | 1904 | |
| Roxbury street (Roxbury)..... | Shawmut avenue, across Kent street. Bitulithic. Laid by Warren Brothers Company. | 557 | 2,160 | 1904 | |
| Ruggles street (Roxbury)..... | Washington street to Shawmut avenue. Wood block. Laid by Boston Paving Company. | 455 | 1,277 | 1913 | Oct. 22, 1918. |
| Ruggles street (Roxbury)..... | 7 feet west of Shawmut avenue to Cabot street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 1,048 | 3,062 | 1907 | Aug. 23, 1917. |
| Ruggles street (Roxbury)..... | Cabot street to Tremont street. Brick block. Laid by J. E. Burns & Co., | 460 | 1,874 | 1909 | |
| Rutland square (city proper)..... | At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 9 | 56 | 1906-07 | |

List of Streets Having a Smooth Pavement—Continued.

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|--|---|--------------------|---------------------------|---------------|----------------------------------|
| St. Alphonsus street (Roxbury)..... | 8 feet north of Tremont street, across Smith street. Bitulithic. Laid by Warren Brothers Company. | 512 | 1,479 | 1905 | |
| St. Botolph street (city proper)..... | At West Newton street. Bitulithic. Laid by Warren Brothers Company... | 1 | 4 | 1903 | |
| St. Botolph street (Roxbury)..... | Each side of Massachusetts avenue. Bitulithic. Laid by Warren Brothers Company. | 8 | 32 | 1903 | |
| St. Cecilia street (Roxbury)..... | At Belvidere street. Bitulithic. Laid by Warren Brothers Company..... | 1 | 3 | 1902 | |
| St. Charles street (city proper)..... | At Chandler street. Anne asphalt (macadam base). Laid by Warren Brothers Company..... Briar block gutters. Laid by Warren Brothers Company..... | 3 { | 8 2 | 1916 1916 | Oct. 28, 1921. Oct. 28, 1921. |
| St. Francis de Sales street (Roxbury)... | Cabot street to Roxbury street. Bitulithic. Laid by James Doherty..... | 452 | 746 | 1914 | Sept. 8, 1919. |
| St. Germain street (Roxbury)..... | At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 2 | 10 | 1901 | |
| St. James avenue (city proper)..... | 8 feet west of Clarendon street to Huntington avenue. Bitulithic. Laid by Boston Elevated Railway Company. | 453 | 1,576 | 1914 | Nov., 1919. |
| St. James avenue (city proper)..... | At Huntington avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | ..... | 17 | 1901 | |
| St. James avenue (city proper)..... | At Huntington avenue. Bitulithic. Laid by James Doherty..... | ..... | 590 | 1912 | Sept. 13, 1917. |
| St. Joseph street (West Roxbury)..... | At South street. Bitulithic. Laid by Warren Brothers Company..... | 2 | 5 | 1913 | Nov. 25, 1918. |
| St. Paul street (Roxbury)..... | Falmouth street to Norway street. Wood block. Laid by United States Wood Preserving Company. | 299 | 777 | 1909 | |
| St. Stephen street (Roxbury)..... | At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 2 | 9 | 1901 | |

| | | 317 | 923 | 1915 | Oct. 18, 1920. |
|--------------------------------------|---|------|-------|---------|----------------|
| St. William street (Dorchester)..... | Dorchester avenue to Auckland street. Trinidad asphalt. Laid by J. J. Sullivan. | | | | |
| Salem street (city proper)..... | Endicott street to 6 feet south of Cross street. Sicilian rook asphalt. Laid by Boston Asphalt Company. | 173 | 330 | 1901 | |
| Salem street (city proper)..... | 6 feet north of Cross street to 5 feet north of south side of Baldwin place. Sicilian rook asphalt. Laid by Boston Asphalt Company. | 700 | 1,384 | 1901 | |
| Salem street (city proper)..... | 5 feet north of south side of Baldwin place to 64 feet north of Baldwin place. Bitulithic. Laid by Warren Brothers Company. | 74 | 150 | 1913 | |
| Salem street (city proper)..... | 64 feet north of Baldwin place to 1 foot north of Prince street. Sicilian rook asphalt. Laid by Boston Asphalt Company. | 117 | 263 | 1901 | |
| Salutation street (city proper)..... | Hanover street to Commercial street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 340 | 253 | 1905 | |
| Saratoga street (East Boston)..... | Bridge over Boston & Albany Railroad. Acme asphalt. Laid by W. A. Murtfeldt Company..... | 95 { | 180 | 1907 | Sept. 6, 1917. |
| | Brick (in street car tracks)..... | | 179 | 1907 | |
| Saratoga street (East Boston)..... | Bridge over Boston, Revere Beach & Lynn Railroad. Brick..... | 89 | 321 | 1913 | |
| Saratoga street (East Boston)..... | West side bridge over Belle Isle inlet to Winthrop line. Brick block. Laid by Lawlor Brothers. | 100 | 378 | 1914 | Dec. 21, 1919. |
| Sarsfield street (Roxbury)..... | At Columbus avenue. Bermudes asphalt. Laid by Boston Asphalt Company. | 18 | 40 | 1906-07 | |
| Schiller street (Roxbury)..... | At Heath street. Brick block. Laid by Field, Barker & Underwood, Inc., | 8 | 25 | 1910 | |
| School street (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 10 | 28 | 1913 | Oct. 21, 1918. |
| Sears street (city proper)..... | At India street. Sicilian rook asphalt. Laid by Boston Asphalt Company.. | 1 | 4 | 1901 | |
| Seaverns avenue (West Roxbury)..... | At Centre street. Bitulithic. Laid by Warren Brothers Company..... | 4 | 28 | 1913 | Nov. 25, 1918. |
| Sedgwick street (West Roxbury)..... | At South street. Bitulithic. Laid by Warren Brothers Company..... | 2 | 6 | 1913 | Nov. 25, 1918. |
| Seneca street (city proper)..... | Harrison avenue to Albany street. Brick block. Laid by Paving Service.. | 503 | 831 | 1910 | |
| Shawmut avenue (city proper)..... | 132 feet south of Castle street, across Cherry street. Trinidad asphalt. Laid by Central Construction Company. | 327 | 956 | 1915 | |

List of Streets Having a Smooth Pavement — *Continued.*

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|-----------------------------------|--|--------------------|---------------------------|---------------|----------------------|
| Shawmut street (city proper)..... | At Pleasant street. Wood block. Laid by Coleman Brothers..... | 9 | 27 | 1913 | Dec. 13, 1918. |
| Sherborn street (Roxbury)..... | At Commonwealth avenue. Wood block. Laid by Clark & Gore..... | 23 | 104 | 1915 | Sept. 2, 1920. |
| Silver street (South Boston)..... | From A street to railroad bridge. Bitulithic. Laid by Warren Brothers Company. | 327 | 490 | 1903 | |
| Silver street (South Boston)..... | Railroad bridge to B street. Bitulithic. Laid by Warren Brothers Com- pany. | 157 | 251 | 1903 | |
| Silver street (South Boston)..... | B street to C street. Sicilian rock asphalt. Laid by Jones & Meehan..... | 512 | 740 | 1901 | |
| Silver street (South Boston)..... | C street to D street. Sicilian rock asphalt. Laid by Jones & Meehan..... | 510 | 737 | 1901 | |
| Silver street (South Boston)..... | 225 feet west of E street to E street. Bitulithic. Laid by Warren Brothers Company. | 225 | 325 | 1903 | |
| Silver street (South Boston)..... | 5 feet west of Dorchester street to Dorchester street. Bitulithic. Laid by Warren Brothers Company. | 5 | 8 | 1905 | |
| Silver street (South Boston)..... | Dorchester street to 4 feet east of Dorchester street. Bitulithic. Laid by Warren Brothers Company. | 4 | 6 | 1905 | |
| Simmons street (Roxbury)..... | Vernon street to Linden Park street. Brick block. Laid by John E. Burns & Co. | 645 | 1,434 | 1909 | |
| Smith street (Roxbury)..... | St Alphonsus street to 7 feet west of Phillips street. Bitulithic. Laid by Warren Brothers Company. | 576 | 1,664 | 1904 | |
| South street (West Roxbury)..... | Centre street to 7 feet north of Jamaica street. Bitulithic. Laid by Warren Brothers Company..... | 1,295 { | 4,427 | 1913 | Nov. 25, 1918. |
| | Wood block. (Brows to street car rails.) Laid by Warren Brothers Company.. | | 300 | 1913 | Nov. 25, 1918. |
| South street (West Roxbury)..... | 7 feet north of Jamaica street to north side Keyes street (east side). Bitulithic. Laid by Warren Brothers Company..... | | 250 | 1913 | Nov. 25, 1918. |
| | Wood block. (Brows to street car rails.) Laid by Warren Brothers Company.. | | 10 | 1913 | Nov. 25, 1918. |

PUBLIC WORKS DEPARTMENT.

381

| | | 10 | 42 | 1913 | Oct. 21, 1918. |
|--|---|-----|-------|---------|----------------|
| Southern avenue (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 10 | 42 | 1913 | |
| Southern avenue (Dorchester)..... | Each side of Talbot avenue. Brick block. Laid by James Doherty..... | 30 | 193 | 1911 | |
| South Margin street (city proper)..... | 2 feet east of Norman street to 7 feet east of Staniford street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 187 | 380 | 1905 | |
| Spear place (city proper)..... | At Pleasant street. Wood block. Laid by Coleman Brothers..... | 10 | 9 | 1913 | Dec. 13, 1918. |
| Spencer street (Dorchester)..... | At Talbot avenue. Brick block. Laid by James Doherty..... | 12 | 61 | 1911 | |
| Spring street (city proper)..... | Allen street to Poplar street. Bitulithic. Laid by Warren Brothers Company. | 205 | 407 | 1913 | June 30, 1918. |
| Spring street (city proper)..... | Poplar street to Chambers street. Trinidad asphalt (cobble base). Laid by Barber Asphalt Paving Company. | 212 | 425 | 1895 | |
| Spring street (city proper)..... | Chambers street to Leverett street. Trinidad asphalt (cobble base). Laid by Barber Asphalt Paving Company. | 216 | 444 | 1895 | |
| Stanhope street (city proper)..... | At Trinity place. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 7 | 15 | 1907 | June 18, 1917. |
| Stanton street (Dorchester)..... | At Norfolk street. Bitulithic. Laid by James Doherty..... | 9 | 54 | 1914 | July 11, 1919. |
| State street (city proper)..... | Washington street to East side old State House. Wood block. Laid by James Doherty..... | 115 | 530 | 1908 | Dec. 4, 1918. |
| | Wood block. Laid by Bernard E. Grant..... | 11 | 32 | 1916 | Dec. 14, 1921. |
| Station street (Roxbury)..... | Columbus avenue to Parker street. Bitulithic. Laid by John F. Beatty... | 613 | 1,770 | 1914 | Dec. 18, 1919. |
| Stevens street (city proper)..... | Lincoln place, toward Shawmut avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 16 | 22 | 1897 | |
| Stillman street (city proper)..... | Endicott street, across North Margin street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 170 | 453 | 1892-95 | |
| Stillman street (city proper)..... | At Salem street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 8 | 7 | 1901 | |
| Stoddard street (city proper)..... | 6 feet north of Howard street to 8 feet south of Court street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 121 | 135 | 1892 | |
| Stoughton street (city proper)..... | Albany street. Sicilian rock asphalt. Laid by Boston Asphalt Company... | 12 | 45 | 1897 | |

List of Streets Having a Smooth Pavement — Continued.

| Streets. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Warranty Expires. |
|-------------------------------------|--|--------------------|---------------------------|---------------|----------------------|
| Stuart street (city proper)..... | At Dartmouth street and at Trinity place. Bitulithic. Laid by James Doherty. | 6 | 26 | 1912 | Sept. 13, 1917. |
| Summer street (city proper)..... | At Washington street. Brick block. Laid by Northern Construction Com- pany. | ..... | 38 | 1915 | |
| Summer street (city proper)..... | Washington street to west side of South street. Wood block. Laid by Northern Construction Company. | 1,229 | 5,668 | 1915 | Aug. 16, 1920. |
| Summer street (East Boston)..... | Bridge over Boston & Albany Railroad. Linner rock asphalt. Laid by W. A. Murtfeldt Company. | 38 | 187 | 1908 | June 25, 1918. |
| Sun Court street (city proper)..... | 7 feet north of North street to Moon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 144 | 211 | 1891 | |
| Talbot avenue (Dorchester)..... | 66 feet east of Washington street to Washington street. Wood block. Laid by William J. Barry. | 66 | 571 | 1913 | Oct. 21, 1918. |
| Talbot avenue (Dorchester)..... | 215 feet west of Norfolk street to 58 feet east of Blue Hill avenue. Brick block. Laid by James Doherty. | 4,300 | 21,325 | 1911 | |
| Taylor street (city proper)..... | Dwight street to Millford street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 184 | 257 | 1896 | |
| Temple place (city proper)..... | Washington street to 95 feet west of Washington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 95 | 318 | 1906 | |
| Temple place (city proper)..... | 95 feet west of Washington street to 22 feet east of Tremont street. Trinidad land asphalt. Laid by United States Paving Company. | 386 | 1,229 | 1900 | |
| Temple place (city proper)..... | 22 feet east of Tremont street to Tremont street. Wood block. Laid by Coleman Brothers. | 22 | 74 | 1915 | June 20, 1920. |
| Tennyson street (city proper)..... | At Pleasant street. Wood block. Laid by Coleman Brothers..... | 10 | 30 | 1913 | Dec. 13, 1918. |
| Tellow street (Roxbury)..... | At Worthington street. Trinidad asphalt. Laid by Central Construction Company. | 4 | 14 | 1915 | Jan. 15, 1921. |

| | | | | |
|-----------------------------------|---|-------|--------|------|
| Thacher street (city proper)..... | 12 feet east of Washington Street North to 5 feet east of Endicott street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 187 | 512 | 1892 |
| Thacher street (city proper)..... | 5 feet east of Endicott street to Endicott street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 5 | 15 | 1899 |
| Thetford avenue (Dorchester)..... | At Norfolk street. Bitulithic. Laid by James Doherty..... | 9 | 44 | 1914 |
| Thomas park (South Boston)..... | Around Telegraph Hill. Bitulithic. Laid by Warren Brothers Company.. | 2,056 | 7,042 | 1905 |
| Thomas street (West Roxbury)..... | At Centre street. Bitulithic. Laid by Warren Brothers Company..... | 2 | 7 | 1913 |
| Tilston street (city proper)..... | 9 feet north of Hanover street across Unity street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 403 | 514 | 1905 |
| Tilston street (city proper)..... | Unity street to 6 feet south of Salem street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 157 | 119 | 1895 |
| Tremlett street (Dorchester)..... | At Washington street. Wood block. Laid by William J. Barry..... | 10 | 32 | 1913 |
| Tremont street (city proper)..... | Scollay square to 19 feet north of Boylston street (except next item). Wood block. Laid by Coleman Brothers. | 2,834 | 10,625 | 1915 |
| Tremont street (city proper)..... | 20 feet north of Winter street, across Temple place (west side). Wood block. Laid by United States Wood Preserving Company. | ..... | 685 | 1900 |
| Tremont street (city proper)..... | See Castle square. | | | |
| Tremont street (Roxbury)..... | St. Alphonsus street to Phillips street. Bitulithic. Laid by Warren Brothers Company. | 537 | 1,854 | 1902 |
| Trent street (Dorchester)..... | Clarkson street to 6 feet north of Coleman street. Trinidad asphalt. Laid by William J. Rafferty & Co. | 222 | 498 | 1915 |
| Trescott street (Dorchester)..... | Pleasant street to Bakersfield street. Bitulithic. Laid by James Doherty.. | 384 | 1,111 | 1914 |
| Trinity place (city proper)..... | Huntington avenue to St. James avenue. Bitulithic. Laid by James Doherty. | 124 | 346 | 1912 |
| Trinity place (city proper)..... | St. James avenue, across Stuart street. Bitulithic. Laid by James Doherty. | 384 | 1,508 | 1912 |
| Trinity place (city proper)..... | Stuart street to 5 feet south of Stuart street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 5 | 14 | 1899 |

List of Streets Having a Smooth Pavement — *Continued.*

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Warranty Expires |
|--------------------------------------|---|--------------------|---------------------------|---------------|---------------------|
| Trinity place (city proper)..... | 5 feet south of Stuart street, across Stanhope street. Trinidad asphalt. (East side.) Laid by Barber Asphalt Paving Company..... | 267 { | 408 | 1907 | June 18, 1917. |
| Trull street (Dorchester)..... | (West side.) Laid by Barber Asphalt Paving Company..... | } | 363 | 1900 | |
| Tuckerman street (South Boston)..... | At Hancock street. Brick block. Laid by Central Construction Company. | 10 | 29 | 1910 | |
| Tudor street (South Boston)..... | Dorchester avenue to Middle street. Arteso asphalt. Laid by Central Construction Company. | 367 | 764 | 1916 | Sept. 11, 1921. |
| Tudor street (South Boston)..... | C street to D street. Sicilian rock asphalt. Laid by Jones & Meehan..... | 506 | 731 | 1901 | |
| Tudor street (South Boston)..... | At Dorchester street. Bitulithic. Laid by Warren Brothers Company..... | 4 | 6 | 1905 | |
| Tuftis street (city proper)..... | 8 feet west of Lincoln street to 13 feet east of Kingston street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 239 | 527 | 1901 | |
| Tuftis street (city proper)..... | 13 feet east of Kingston street to Kingston street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 13 | 33 | 1910 | |
| Tuftis street (city proper)..... | 8 feet west of South street to 7 feet east of Lincoln street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 211 | 470 | 1901 | |
| Tuftis street (Charlestown)..... | Bunker Hill street to 141 feet north of Bunker Hill street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 141 | 415 | 1897 | |
| Tyler street (city proper)..... | Beach street to Kneeland street. Bitulithic. Laid by Warren Brothers Company. | 306 | 815 | 1905 | |
| Tyler street (city proper)..... | Kneeland street to Harvard street. Bitulithic. Laid by Warren Brothers Company. | 319 | 850 | 1905 | |
| Tyler street (city proper)..... | Harvard street to Oak street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 518 | 1,381 | 1901 | |
| Tyler street (city proper)..... | Oak street to Curve street. Bitulithic. Laid by Warren Brothers Company.. | 428 | 1,152 | 1905 | |

PUBLIC WORKS DEPARTMENT.

385

| Union Park street (city proper) | Washington street to Harrison avenue. Acme asphalt. Laid by Fred S. & A. D. Gore Corporation. | 461 { | 1,719 685 | 1913 1916 | June 28, 1918. |
|---------------------------------------|---|-------|--------------|--------------|-----------------|
| Unity street (city proper) | Standard asphalt. Laid by Central Construction Company. | } | | | |
| Upnam avenue (Dorchester) | Charter street to Tileston street. Trinidad asphalt. Laid by Barber As- phalt Paving Company. | 330 | 500 | 1897 | |
| Upland avenue (Dorchester) | At Hancock street. Brick block. Laid by Central Construction Company. | 10 | 30 | 1911 | |
| Utica street (city proper) | Park street to Melville avenue. Astec asphalt. Laid by Central Con- struction Company. | 748 | 2,509 | 1916 | Nov. 28, 1921. |
| Vernon street (Roxbury) | At Tufts street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 3 | 5 | 1901 | |
| Vernon street (Roxbury) | Tremont street to Cabot street. Brick block. Laid by J. E. Burns & Co. . . | 798 | 2,527 | 1909 | |
| Vernon street (Roxbury) | 80 feet east of Cabot street to 7 feet east of Auburn street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 604 | 1,788 | 1907 | Nov. 30, 1917. |
| Vernon street (Roxbury) | Shawmut avenue to Washington street. Wood block. Laid by Boston Paving Company. | 281 | 814 | 1913 | Oct. 22, 1918. |
| Vine street (Roxbury) | At Dudley street. Brick block. Laid by James Doherty | 7 | 20 | 1910 | |
| Vine street (Charlestown) | Bunker Hill street, across Moulton street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 165 | 670 | 1897 | |
| Walden street (Roxbury) | At Heath street. Brick block. Laid by Field, Barker & Underwood, Inc., | 8 | 18 | 1910 | |
| Wales street (Dorchester) | At Talbot avenue. Brick block. Laid by James Doherty | 15 | 82 | 1911 | |
| Walpole street (Roxbury) | At Columbus avenue. Bermudes asphalt. Laid by Boston Asphalt Com- pany. | 18 | 46 | 1906-07 | |
| Warren avenue (city proper) | Berkeley street to 4 feet west of Berkeley street. Bitulithic. Laid by Warren Brothers Company. | 4 | 25 | 1908 | |
| Warren avenue (city proper) | 4 feet west of Berkeley street to 4 feet east of Pembroke street. Wood block. Laid by Boston Paving Company. | 2,046 | 12,217 | 1913 | Dec. 13, 1918. |
| Warren street (Roxbury) | At Washington street. Wood block. Laid by James Doherty | 10 | 73 | 1911 | |
| Warren street (Roxbury) | At Dudley street. Wood block. Laid by James Doherty | 23 | 216 | 1912 | Sept. 21, 1917. |

List of Streets Having a Smooth Pavement—Continued.

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|---------------------------------------|--|--------------------|---------------------------|---------------|----------------------|
| Warren street (Charlestown)..... | Winthrop street, across Soley street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 128 | 302 | 1901 | |
| Warrenton street (city proper)..... | 8 feet south of Eliot street to 392 feet south of Eliot street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 384 | 1,045 | 1891 | |
| Warrenton street (city proper)..... | 392 feet south of Eliot street to 9 feet north of Tremont street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 269 | 630 | 1884 | |
| Warrenton street (city proper)..... | 13 feet south of Shawmut avenue to Washington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 464 | 928 | 1891 | |
| Warwick street (Roxbury)..... | At Ruggles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 6 | 18 | 1907 | Aug. 23, 1917. |
| Washington Street North (Charlestown) | Bridges over Fitchburg Division, Boston & Maine Railroad. Trinidad asphalt. Laid by Simpson Brothers Corporation. | 61 | 543 | 1899 | |
| Washington street (city proper)..... | 8 feet south of Cornhill to 78 feet south of Court avenue. Wood block. Laid by James Doherty. | 509 | 1,475 | 1908 | Nov. 21, 1918. |
| Washington street (city proper)..... | 78 feet south of Court avenue to 5 feet south of Milk street. Wood block. Laid by United States Wood Preserving Company. | 538 | 1,860 | 1907 | June 26, 1917. |
| Washington street (city proper)..... | 5 feet south of Milk street to Beach street. Wood block. Laid by United States Wood Preserving Company. | 2,279 | 8,600 | 1906 | |
| Washington street (city proper)..... | At Avery street. Wood block. Laid by Coleman Brothers..... | ..... | 80 | 1914 | Nov. 6, 1919. |
| Washington street (city proper)..... | At Pleasant street. Wood block. Laid by Coleman Brothers..... | ..... | 20 | 1913 | Dec. 13, 1918. |
| Washington street (city proper)..... | Bridge over Boston & Albany Railroad. Brick. Laid by W. A. Murtfeldt Company. | 60 | 216 | 1908 | |
| Washington street (Roxbury)..... | Williams street to 27 feet north of Marvin street. Wood block. Laid by James Doherty. | 1,028 | 4,779 | 1911 | |

| | | | | |
|---|---|---------|----------------|--|
| Washington street (Roxbury)..... | 27 feet north of Marvin street, across Zeigler street (west side). Trinidad asphalt. Laid by Barber Asphalt Paving Company. | ..... | 210 | 1904 |
| Washington street (Roxbury)..... | Zeigler street to 20 feet north of Dudley street. Wood block. Laid by James Doherty. | 186 | 745 | 1911 |
| Washington street (Roxbury)..... | 20 feet north of Dudley street to Dudley street. Wood block. Laid by James Doherty. | 20 | 105 | 1912 Sept. 21, 1917. |
| Washington street (Roxbury)..... | Dudley street to 130 feet south of Dudley street. Wood block. Laid by James Doherty. | 130 | 930 | 1912 Sept. 21, 1917. |
| Washington street (West Roxbury)..... | La Grange street southerly. Topekta (macadam base.) East roadway. Maintained by Massachusetts Highway Commission. West roadway. Maintained by Massachusetts Highway Commission. | 4,559 { | 9,624 5,491 | 1916 1916 |
| Washington street (West Roxbury)..... | 29 feet south of Grove street to 529 feet south of Grove street (east roadway). Concrete road. Maintained by Massachusetts Highway Commission. | 500 | 1,055 | 1916 |
| Washington street (Roxbury and Dorchester). | Blue Hill avenue to 116 feet south of Fenelon street, and from Eldon street to 42 feet south of Bowdoin street. Wood block. Laid by William J. Barry. | 4,010 | 18,023 | 1912-13 Oct. 21, 1918. |
| Washington street (Dorchester)..... | 42 feet south of Bowdoin street, across Talbot avenue. Wood block. Laid by William J. Barry. | 3,440 | 16,402 | 1913 Oct. 21, 1918. |
| Washington street (Brighton)..... | Cambridge street to 126 feet west of Chestnut Hill avenue. Bitulithic. Laid by Warren Brothers Company. Wood block. (Brows to street car rails.) Laid by Warren Brothers Company. | 1,021 { | 5,030 217 | 1913 1913 Oct. 24, 1918. Oct. 24, 1918. |
| Water street (city proper)..... | 2 feet west of Devonshire street to Devonshire street. Wood block. Laid by Bernard E. Grant. | 2 | 6 | 1916 Dec. 14, 1921. |
| Water street (city proper)..... | Devonshire street to 7 feet east of Devonshire street. Wood block. Laid by Bernard E. Grant. | 7 | 33 | 1916 Dec. 14, 1921. |
| Water street (city proper)..... | 7 feet east of Devonshire street to 8 feet west of Congress street. Wood block. Laid by United States Wood Preserving Company. | 198 | 885 | 1907 July 12, 1917. |
| Water street (city proper)..... | 7 feet east of Congress street to Kilby street. Residual asphalt. Laid by Central Construction Company. | 249 | 690 | 1915 |
| Water street (city proper)..... | Liberty square to 19 feet east of Liberty square. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 19 | 46 | 1896 |

List of Streets Having a Smooth Pavement — Continued.

| Streets. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|--|---|--------------------|---------------------------|---------------|----------------------|
| Water street (city proper)..... | 19 feet east of Liberty square to 8 feet west of Broad street. Residual asphalt. Laid by Central Construction Company. | 225 | 614 | 1915 | |
| Waterford street (city proper)..... | 8 feet west of Washington street to 1 foot east of Shawmut avenue. Seyssel rock asphalt. Laid by Jones & Meehan. | 307 | 529 | 1897 | |
| Wellington street (city proper)..... | At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 9 | 34 | 1906-07 | |
| Wensley street (Roxbury)..... | At Heath street. Brick block. Laid by Field, Barker & Underwood, Inc... | 8 | 53 | 1910 | |
| Wentworth street (Dorchester)..... | At Norfolk street. Bitulithic. Laid by James Doherty..... | 1 | 4 | 1913 | July 11, 1919. |
| West street (city proper)..... | Washington street to 8 feet west of Washington street. Brick block..... | 8 | 20 | 1908 | |
| West street (city proper)..... | 8 feet west of Washington street to 22 feet east of Tremont street. Wood block. Laid by United States Wood Preserving Company. | 463 | 1,126 | 1908 | Sept. 19, 1918. |
| West street (city proper)..... | 22 feet east of Tremont street to Tremont street. Wood block. Laid by Coleman Brothers. | 22 | 64 | 1915 | June 20, 1920. |
| West Broadway (South Boston)..... | 196 feet east of Dorchester avenue to 8 feet west of A street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 352 | 1,278 | 1892 | |
| West Broadway (South Boston)..... | Gardner place to 150 feet east of Gardner place. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 150 | 648 | 1893 | |
| West Broadway (South Boston)..... | 150 feet west of F street to 267 feet east of F street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 448 | 1,544 | 1897 | |
| West Broadway (South Boston)..... | 267 feet east of F street to 28 feet west of Dorchester street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 410 | 1,818 | 1898 | |
| West Broadway (South Boston)..... | 28 feet west of Dorchester street (south) to west side of Dorchester street (north). Bitulithic. Laid by Warren Brothers Company. | 81 | 230 | 1905 | |
| West Brookline street (city proper)..... | At Warren avenue. Wood block. Laid by Boston Paving Company..... | 4 | 16 | 1913 | Dec. 13, 1918. |

| | | | | | |
|--|--|-------|--------------|--------------|----------------------------------|
| West Canton street (city proper)..... | 13 feet west of Tremont street to 4 feet east of Warren avenue. Acme asphalt (macadam base). Laid by Warren Brothers Company. Brick block gutters. Laid by Warren Brothers Company. | 585 { | 1,866 320 | 1916 1916 | Oct. 21, 1921. Oct. 21, 1921. |
| West Canton street (city proper)..... | 4 feet east of Warren avenue to Warren avenue. Wood block. Laid by Boston Paving Company. | 4 | 18 | 1913 | Dec. 13, 1918. |
| West Canton street (city proper)..... | Warren avenue to 4 feet west of Warren avenue. Wood block. Laid by Boston Paving Company. | 4 | 18 | 1913 | Dec. 13, 1918. |
| West Canton street (city proper)..... | 4 feet west of Warren avenue to 2 feet east of Appleton street. Acme asphalt (macadam base). Laid by Warren Brothers Company. Brick block gutters. Laid by Warren Brothers Company. | 257 { | 828 145 | 1916 1916 | Oct. 21, 1921. Oct. 21, 1921. |
| West Canton street (city proper)..... | 2 feet east of Appleton street to Appleton street. Bitulithic. Laid by Fred S. & A. D. Gore Corporation. | 2 | 11 | 1912 | Aug. 2, 1917. |
| West Canton street (city proper)..... | At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 9 | 34 | 1906-07 | |
| Westcott street (Dorchester)..... | At Talbot avenue. Brick block. Laid by James Doherty..... | 12 | 60 | 1911 | |
| West Fifth street (South Boston)..... | At Dorchester street. Bitulithic. Laid by Warren Brothers Company. | 4 | 15 | 1905 | |
| West Fourth street (South Boston)..... | At Dorchester street. Bitulithic. Laid by Warren Brothers Company. | 5 | 19 | 1905 | |
| West Fourth street (South Boston)..... | 2 feet east of E street to E street. Bitulithic. Laid by Warren Brothers Company. | 2 | 7 | 1903 | |
| West Fourth street (South Boston)..... | E street to 207 feet west of E street. Bitulithic. Laid by Warren Brothers Company. | 207 | 759 | 1903 | |
| Westland avenue (Roxbury)..... | At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 1 | 9 | 1901 | |
| Westminster street (Roxbury)..... | At Hammond street. Wood block. Laid by Fred S. & A. D. Gore Corporation. | 23 | 120 | 1912 | Nov. 12, 1917. |
| Westminster street (Roxbury)..... | At Ruggles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 6 | 17 | 1907 | Aug. 23, 1917. |
| West Newton street (city proper)..... | 13 feet west of Tremont street to 13 feet east of Columbus avenue. Bitulithic. Laid by Warren Brothers Company. | 766 | 2,063 | 1904 | |

List of Streets Having a Smooth Pavement — Continued.

| STREETS. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|---|--|--------------------|---------------------------|---------------|----------------------|
| West Newton street (city proper) | 13 feet east of Columbus avenue to Columbus avenue. Bitulithic. Laid by Fred S. & A. D. Gore Corporation. | 13 | 97 | 1912 | Aug. 2, 1917. |
| West Newton street (city proper) | Columbus avenue to 10 feet south of Huntington avenue, minus area and length of New York, New Haven & Hartford Railroad Bridge. Bitulithic. Laid by Warren Brothers Company. | 1,034 | 3,909 | 1903 | |
| West Newton street (city proper) | 4 feet south of Huntington avenue to Huntington avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 4 | 19 | 1896 | |
| West Newton street (city proper) | Huntington avenue to 4 feet north of Huntington avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 4 | 19 | 1896 | |
| West Newton street (city proper) | 4 feet north of Huntington avenue, across Belvidere street. Bitulithic. Laid by Warren Brothers Company. | 248 | 933 | 1903 | |
| Weston street (Roxbury) | At Columbus avenue. Bermudes asphalt. Laid by Boston Asphalt Company. | 9 | 20 | 1906-07 | |
| West Rutland square (city proper) | At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 9 | 34 | 1906-07 | |
| West Seventh street (South Boston) | At Dorchester street. Bitulithic. Laid by Warren Brothers Company | 4 | 16 | 1905 | |
| West Sixth street (South Boston) | At Dorchester avenue. Bitulithic. Laid by Warren Brothers Company | 4 | 18 | 1905 | |
| West Sixth street (South Boston) | C street to D street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 503 | 1,490 | 1905 | |
| West Springfield street (city proper) | At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 9 | 34 | 1906-07 | |
| West Third street (South Boston) | 153 feet west of E street to 2 feet east of E street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 187 | 702 | 1892 | |
| West Tremlett street (Dorchester) | At Washington street. Wood block. Laid by William J. Barry | 10 | 24 | 1913 | Oct. 21, 1918. |

PUBLIC WORKS DEPARTMENT.

391

| | • 1 | 3 | 1901 |
|------------------------------------|-----|-------|---------|
| Wharf street (city proper)..... | | | |
| Whitfield street (Dorchester)..... | 10 | 38 | 1913 |
| Whitmore street (city proper)..... | 360 | 585 | 1909 |
| Whitmore street (city proper)..... | 13 | 60 | 1911 |
| Whitmore street (Dorchester)..... | 13 | 57 | 1911 |
| Whitmore street (Dorchester)..... | 88 | 265 | 1914 |
| Whitmore street (Dorchester)..... | 414 | 1,212 | 1914 |
| Whitmore street (Dorchester)..... | 2 | 7 | 1914 |
| Whitmore street (Dorchester)..... | 1 | 4 | 1913 |
| Whitmore street (city proper)..... | 235 | 417 | 1895 |
| Whitmore street (city proper)..... | 6 | 10 | 1910 |
| Whitmore terrace (Dorchester)..... | 10 | 26 | 1911 |
| Whitmore street (Roxbury)..... | 636 | 1,874 | 1909 |
| Whitmore street (Roxbury)..... | 207 | 782 | 1909 |
| Whitmore street (Roxbury)..... | 5 | 25 | 1906-07 |
| Whitmore street (city proper)..... | 6 | 7 | 1901 |

List of Streets Having a Smooth Pavement — *Concluded.*

| Streets. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
|---------------------------------------|--|--------------------|---------------------------|---------------|----------------------|
| Wiget street (city proper) | 6 feet west of Salem street to North Margin street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 253 | 233 | 1897 | |
| Wiggin street (city proper) | North Bennet street to Tileston street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 108 | 120 | 1905 | |
| Wigglesworth street (Roxbury) | At Longwood avenue. Brick block. Laid by Field, Barker & Underwood, Inc. | 8 | 23 | 1910 | |
| Wilder street (Dorchester) | At Washington street. Wood block. Laid by William J. Barry | 10 | 30 | 1912 | Oct. 21, 1918. |
| Winchester street (city proper) | At Pleasant street. Wood block. Laid by Coleman Brothers | 10 | 28 | 1913 | Dec. 13, 1918. |
| Winship street (Brighton) | At Washington street. Bitulithic. Laid by Warren Brothers Company .. | 18 | 140 | 1913 | Oct. 24, 1918. |
| Winslow street (Roxbury) | At Zeigler street. Bitulithic. Laid by John F. Beatty | 1 | 3 | 1914 | Aug. 31, 1919. |
| Winslow street (Roxbury) | At Dudley street. Brick block. Laid by James Doherty | 8 | 23 | 1910 | |
| Winter street (city proper) | Washington street to 10 feet east of Tremont street. Bitulithic. Laid by Warren Brothers Company. | 505 | 1,122 | 1913 | Aug. 29, 1918. |
| Winter street (city proper) | 10 feet east of Tremont street to Tremont street. Wood block. Laid by Coleman Brothers. | 10 | 31 | 1915 | June 20, 1920. |
| Winter street (Dorchester) | At Bowdoin street. Brick block. Laid by Central Construction Company, | 9 | 45 | 1913 | Sept. 12, 1918. |
| Wirt street (Brighton) | At Washington street. Bitulithic. Laid by Warren Brothers Company .. | 12 | 212 | 1913 | Oct. 24, 1918. |
| Withington street (Dorchester) | At Norfolk street. Bitulithic. Laid by James Doherty | 1 | 4 | 1913 | July 11, 1919. |
| Woodcliff street (Roxbury) | Dacia street to Blue Hill avenue. Bitulithic. Laid by Warren Brothers Company. | 310 | 896 | 1906 | |
| Worcester street (city proper) | At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 9 | 34 | 1906-07 | |

| | | | | | | |
|------------------------------------|---|------------------------------------|-----------------------------|-----|-------|------------------------|
| Worthington street (Roxbury)..... | 8 feet south of Longwood avenue to Longwood avenue. Laid by Field, Barber & Underwood, Inc. | Brick block. | Laid | 8 | 23 | 1910 |
| Worthington street (Roxbury)..... | Longwood avenue to 8 feet north of Longwood avenue. Laid by Field, Barber & Underwood, Inc. | Brick block. | Laid | 8 | 26 | 1910 |
| Worthington street (Roxbury)..... | 8 feet north of Longwood avenue to street No. 230. Laid by Central Construction Company. | Trinidad asphalt. | Laid | 828 | 2,395 | 1915 Jan. 15, 1921. |
| Yarmouth street (city proper)..... | At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | Laid by Barber Asphalt Paving | | 9 | 34 | 1906 |
| Zeigler street (Roxbury)..... | 7 feet east of Washington street to Warren street. Laid by R. S. Blome Company. | Granitoid concrete block pavement. | | 315 | 946 | 1908 |
| Zeigler street (Roxbury)..... | Warren street to Harrison avenue. Bituthic. Laid by John F. Beatty..... | Bituthic. | Laid by John F. Beatty..... | 177 | 380 | 1914 Aug. 31, 1919. |
| Zeigler street (Roxbury)..... | 8 feet east of Harrison avenue to 6 feet west of Dearborn street. Laid by John F. Beatty. | Bituthic. | Bituthic. | 869 | 1870 | 1914 Aug. 31, 1919. |

SUMMARIES OF SMOOTH PAVEMENT STREETS, FEBRUARY 1, 1917.
Asphalt.

| KIND. | UNDER GUARANTY. | | NOT UNDER GUARANTY. | | TOTALS. | |
|--------------------------------------|------------------|---------------------------|---------------------|---------------------------|------------------|---------------------------|
| | Length, Feet. | Area, Square Yards. | Length, Feet. | Area, Square Yards. | Length, Feet. | Area, Square Yards. |
| Trinidad asphalt. | 21,895 | 65,692 | 54,741 | 144,407 | 76,636 | 210,099 |
| Sicilian rock asphalt. | ..... | ..... | 33,698 | 93,199 | 33,698 | 93,199 |
| Seyssel rock asphalt. | ..... | ..... | 2,810 | 4,786 | 2,810 | 4,786 |
| American rock asphalt. | 758 | 3,039 | 806 | 2,772 | 1,564 | 5,811 |
| Limmer rock asphalt. | 38 | 187 | ..... | ..... | 38 | 187 |
| Limmer rock and Acme asphalts mixed. | ..... | ..... | 164 | 455 | 164 | 455 |
| Acme asphalt. | 7,116 | 21,504 | 3,880 | 11,332 | 10,996 | 32,836 |
| Bernudez asphalt. | ..... | ..... | 4,018 | 16,060 | 4,018 | 16,060 |
| Residual asphalt. | ..... | ..... | 1,272 | 3,810 | 1,272 | 3,810 |
| Standard asphalt. | ..... | ..... | 45 | 1,680 | 45 | 1,680 |
| Standard and Astec asphalts. | ..... | ..... | 457 | 1,767 | 457 | 1,767 |
| Astec and Trinidad asphalts. | 589 | 1,489 | ..... | ..... | 589 | 1,489 |
| Astec asphalt. | 6,434 | 18,100 | ..... | ..... | 6,434 | 18,190 |
| Total of all asphalts. | 38,830 | 110,101 | 101,891 | 280,268 | 138,721 | 390,369 |

Summaries of Smooth Pavement Streets, February 1, 1917.—*Concluded.*

| Kind. | UNDER GUARANTY. | | NOT UNDER GUARANTY. | | TOTALS. | |
|--|------------------|---------------------------|---------------------|---------------------------|------------------|---------------------------|
| | Length, Feet. | Area, Square Yards. | Length, Feet. | Area, Square Yards. | Length, Feet. | Area, Square Yards. |
| Asphalt block..... | ..... | ..... | 98 | 774 | 98 | 774 |
| Bitulithio..... | 43,843 | 178,043 | 28,172 | 98,298 | 72,015 | 276,341 |
| Topeka..... | 4,983 | 16,355 | ..... | ..... | 4,983 | 16,355 |
| Endurite..... | 467 | 1,816 | ..... | ..... | 467 | 1,816 |
| Hassam pavement..... | ..... | ..... | 139 | 672 | 139 | 672 |
| Granitoid concrete block pavement..... | ..... | ..... | 315 | 946 | 315 | 946 |
| Concrete road..... | 500 | 1,055 | 3,784 | 9,986 | 4,284 | 11,041 |
| Roman road..... | 433 | 1,250 | ..... | ..... | 433 | 1,250 |
| Wood block..... | 33,555 | 168,317 | 14,595 | 56,251 | 48,150 | 224,568 |
| Brick block..... | 1,181 | 6,823 | 27,414 | 106,125 | 28,595 | 112,948 |
| Scoria block..... | ..... | ..... | 322 | 254 | 322 | 254 |
| Total of all smooth pavements..... | 121,792 | 483,760 | 176,730 | 563,574 | 298,522 | 1,037,334 |

LIST OF STREETS PAVED WITH GRANITE BLOCKS HAVING A MAINTENANCE QUARANTY.

| Streets. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Quaranty Expires. |
|---|---|--------------------|---------------------------|---------------|----------------------|
| Albany street (city proper) | Dover street, across Malden street. Laid by Bernard E. Grant. | 1,662 | 10,654 | 1916 | 1922. |
| Batterymarch street (city proper) | 2 feet west of Broad street to 93 feet west of Broad street. Laid by Bernard E. Grant. | 91 | 282 | 1916 | Oct. 20, 1921. |
| Batterymarch street (city proper) | Angle to Franklin street. Laid by Bernard E. Grant. | 197 | 808 | 1916 | Oct. 20, 1921. |
| Columbia road (Dorchester) | 8 feet north of Dudley street to 52 feet south of East Cottage street. Laid by Bernard E. Grant. | 1,461 | 4,630 | 1916 | Nov. 18, 1921. |
| Devonshire street (city proper) | Dock square to 75 feet south of Dock square (east side). Laid by Bernard E. Grant. | 75 | 117 | 1916 | Dec. 14, 1921. |
| School street (city proper) | Washington street to Tremont street. Laid by Bernard E. Grant. | 570 | 1,298 | 1916 | Nov. 13, 1921. |
| Washington street (West Roxbury) | Arboreway across Asticou road (west side). Laid by James Doherty. .... | ..... | 2,240 | 1916 | Dec. 2, 1921. |
| Total | | 4,056 | 20,029 | | |

HIGHWAY DIVISION — SANITARY SERVICE.

FINANCIAL STATEMENT.

| | |
|-------------------------|---------------------|
| Appropriation | \$963,488 76 |
| Transfers | 5,950 12 |
| | <u>\$969,438 88</u> |

INCOME.

Statement showing amount of cash and bills deposited with the City Collector from February 1, 1916, to January 31, 1917, and credited to the General Revenue.

| | |
|--|--------------------|
| Tickets for the removal of ashes and waste | \$57,548 05 |
| Bills for the removal of ashes and waste | 269 71 |
| Use of scow | 310 00 |
| Old material | 153 81 |
| Work done and material furnished | 66 66 |
| Old scow sold | 10 00 |
| Manure (less abatements) | 1,647 91 |
| Horse killed on account of glanders | 50 00 |
| | <u>\$60,056 14</u> |

AMOUNT PAID INTO THE CITY TREASURY DURING THE YEAR.

| | |
|--|--------------------|
| Removal of ashes and waste | \$57,548 05 |
| Work done and material furnished | 80 08 |
| Use of scow | 310 00 |
| Old material | 153 81 |
| Old scow | 10 00 |
| Horse killed | 50 00 |
| Manure | 1,647 91 |
| | <u>\$59,799 85</u> |

SPECIAL APPROPRIATION.

REFUSE TRANSFER STATION.

Ward Street Receiving Station.

| | |
|--|-------------------|
| Engineering | \$95 72 |
| Engineering expense | 1 15 |
| Amount paid to the Boston Bridge Works, under contract | 188 71 |
| Lumber | 204 69 |
| Hose | 45 50 |
| Forging castings | 326 13 |
| Scale, 10-ton | 227 50 |
| Wire | 38 30 |
| Moving building | 25 00 |
| Cement | 23 76 |
| Crushed stone | 12 77 |
| Sand | 6 86 |
| Hardware | 1 60 |
| Paving driveway | 100 81 |
| | <u>\$1,298 50</u> |

Total Cost of House Dirt, Waste, Rubbish and House Offal.

| | |
|---|---------------------|
| Salaries of division engineer, supervisor and medical inspector | \$6,034 33 |
| Office supplies and expenses, printing, stationery, etc. | 4,076 78 |
| Ashes, waste and rubbish account | 608,950 09 |
| House offal account | 270,059 43 |
| Annuities | \$600 00 |
| Retired veterans' pensions | 4,166 94 |
| Retired laborers' pensions | 13,120 68 |
| | <u>17,887 62</u> |
| <i>Carried forward</i> | <u>\$907,008 25</u> |

| | |
|---------------------------|--------------------|
| * Cost for 1913 | \$436 22 |
| Cost for 1914 | 18,679 95 |
| Cost for 1915 | 18,333 21 |
| Cost for 1916 | 1,298 50 |
| | <u>\$38,747 88</u> |

PUBLIC WORKS DEPARTMENT.

399

| | | |
|---|-------------|---------------------|
| <i>Brought forward</i> | | \$907,008 25 |
| Construction, Repair and Horseshoeing Account: | | |
| Expended for labor | \$54,636 38 | - |
| Expended for stock | 26,355 47 | |
| | <hr/> | 80, 991 85 |
| | | <hr/> |
| | | \$988,000 10 |
| Work done for other services and paid for by the payment of bills and pay rolls: | | |
| Bridge Service | \$247 10 | |
| Paving Service | 3,379 06 | |
| Sewer Service | 309 65 | |
| Street Cleaning Service | 10,960 02 | |
| Water Service | 3,665 41 | |
| | <hr/> | 18,561 24 |
| | | <hr/> |
| | | <u>\$969,438 86</u> |

Items of Expenditure for the Year 1916-17.

| | |
|---|------------|
| Salary, division engineer (in part)..... | \$834 00 |
| Salary, medical inspector (in part)..... | 499 98 |
| Salary, chief veterinarian (in part)..... | 1,000 00 |
| Salary, supervisor (in part)..... | 1,745 12 |
| Salary, general foreman (in part)..... | 1,246 70 |
| Salaries, yard clerks..... | 2,178 02 |
| Salaries, foremen..... | 12,565 28 |
| Labor, collecting and disposing of house dirt and ashes..... | 212,697 72 |
| Labor, collecting and disposing of waste and rubbish..... | 32,009 01 |
| Labor, collecting and disposing of house offal..... | 164,801 24 |
| Labor and stock at stable and yards..... | 57,797 50 |
| Hired teams on ashes..... | 151,530 39 |
| Hired teams on offal..... | 8,763 44 |
| Contracts on ashes, East Boston, Brighton, West Roxbury and Dorchester..... | 84,296 11 |
| Contracts on offal, East Boston, Brighton, West Roxbury and Dorchester..... | 38,309 67 |
| Holidays, pay allowed..... | 26,218 37 |
| Vacations, pay allowed..... | 15,066 10 |
| Military service, pay allowed..... | 756 00 |
| Grain..... | 21,039 15 |
| Hay and straw..... | 25,606 70 |
| Medical attendance and pay allowed injured employees..... | 6,648 89 |
| Veterinary services and medicines..... | 793 74 |
| Horses, purchase of..... | 2,112 50 |
| Horse hire..... | 33 00 |
| Outside board of horses..... | 1,044 00 |
| Outside wheelwrighting, blacksmithing, horseshoeing, etc..... | 7,502 33 |
| Labor and stock, wheelwright, blacksmith, painting, etc..... | 51,074 93 |
| Repairs to stables and sheds..... | 818 02 |
| Fuel..... | 1,625 34 |
| Gas..... | 496 22 |
| Electric light and power..... | 3,956 50 |
| Printing, stationery, office supplies, etc..... | 2,311 07 |
| Automobile expense..... | 12,140 58 |

| | Super- visor. | South Boston Electric Truck. | Charles- town Electric Truck. | Garford. | Roxbury Ford. | South End Truck. | Total. |
|------------------------|------------------|---------------------------------------|--|------------|------------------|------------------------|-------------|
| Cost..... | | | | | \$363 25 | | \$363 25 |
| Supplies..... | \$113 56 | \$331 45 | \$596 52 | \$703 40 | 26 85 | \$67 68 | 1,839 46 |
| Repairs..... | 1,246 77 | 211 60 | 2,103 18 | 1,786 74 | 54 47 | 163 42 | 5,506 18 |
| Tires and tubes..... | 151 05 | 208 28 | 104 14 | | | | 463 47 |
| Gasoline..... | 194 13 | | | 22 51 | 4 65 | 48 20 | 269 49 |
| Storage..... | 61 45 | 66 75 | 100 00 | 120 00 | | | 348 20 |
| Chauffeurs' wages..... | 708 53 | 1,000 00 | 1,000 00 | 582 00 | | | 3,290 53 |
| Totals..... | \$2,475 49 | \$1,818 08 | \$3,903 84 | \$3,214 65 | \$449 22 | \$279 30 | \$12,140 58 |

| | |
|----------------------------------|---------------------|
| Telephone tolls and rentals..... | 2,033 62 |
| Annuities..... | 600 00 |
| Retired veterans' pension..... | 4,166 94 |
| Retired laborers' pension..... | 13,120 68 |
| | <u>\$969,438 86</u> |

Construction and Repair Shops, 1916-17.

For work done and materials furnished for other services and for the Sanitary Service the different shops received and expended the following amounts:

| | STOCK AND LABOR. | | Total. |
|---------------------------|------------------|-------------|-------------|
| | Other Services. | Sanitary. | |
| Wheelwright..... | \$6,481 31 | \$3,767 60 | \$10,248 91 |
| Blacksmith..... | 5,429 02 | 8,766 31 | 14,195 33 |
| Paint..... | 2,882 20 | 5,602 91 | 8,485 11 |
| Harness..... | 2,347 16 | 6,482 53 | 8,829 69 |
| Horseshoeing — South End, | 1,421 55 | 2,658 70 | 4,080 25 |
| Horseshoeing — West End, | | 2,095 97 | 2,095 97 |
| Horseshoeing — Roxbury... | | 2,388 92 | 2,388 92 |
| Totals, stock and labor, | \$18,561 24 | \$31,762 94 | \$50,324 18 |

| | | |
|---|------------|--------------------|
| Foreman | \$1,795 04 | |
| Clerk | 797 68 | |
| Express teamster | 780 01 | |
| Holidays, pay allowed | 4,840 76 | |
| Vacation and military | 2,441 54 | |
| Expended for electric power | 421 35 | |
| | | \$11,076 38 |
| Total cost, maintenance | | \$61,400 56 |
| Income from outside services and depart- ments | | 18,561 24 |
| Net cost of shops | | <u>\$42,839 32</u> |

*Detailed Accounts of Amounts Paid to the Sanitary Service
During Year Ending January 31, 1917, by the Payment
of Bills and Pay Rolls.*

| | |
|--|----------------------|
| For repair and construction work | \$17,200 57 |
| For horseshoeing | 1,674 80 |
| For hay, straw, grain and board and care of horses, | 795 00 |
| For feeders, stablemen and watchmen | 795 00 |
| For furnishing of prison vans and printing | 48 76 |
| | <u>* \$20,514 13</u> |

* Includes bill paid by the County of Suffolk, \$1,952.89.

Horseshoeing, by Divisions.

| KINDS AND STYLES. | HIGHWAY DIVISION. | | | Sewer and Water Division, Sewer Service. | Sewer and Water Division, Water Service. | County of Suffolk. | Totals. |
|-------------------|-------------------|--|-----------------|---|---|--------------------|---------|
| | Sanitary Service. | Street Cleaning and Oiling Service. | Paving Service. | | | | |
| Plain shoes..... | 6,430 | 4,627 | 507 | 140 | 1,125 | 167 | 12,906 |
| Bar shoes..... | 558 | 256 | 41 | 10 | 109 | 24 | 998 |
| Leathers..... | 5,070 | 3,927 | 221 | 75 | 475 | 31 | 9,799 |
| Resets..... | 1,191 | 885 | 61 | 78 | 269 | 44 | 2,528 |
| Pads..... | 245 | 459 | 176 | 12 | 136 | 127 | 1,155 |

Cost of Horseshoeing.

| | Division Shops. | Outside Shops. |
|-------------|--------------------|-------------------|
| Stock..... | \$1,794 21 | \$3,186 34 |
| Labor..... | 6,770 93 | |
| Totals..... | \$8,565 14 | \$3,186 34 |

Amount Expended for the Collection and Disposal of Ashes, Garbage, Waste and Rubbish by Districts.

| Districts. | Popu- lation. | ASHES. | | GARBAGE. | | WASTE AND RUBBISH. | | Total Cost. | Total Cost per Capita. |
|--------------------------------------|------------------|--------------|---------------------|--------------|---------------------|--------------------|---------------------|--------------|---------------------------|
| | | Cost. | Cost per Capita. | Cost. | Cost per Capita. | Cost. | Cost per Capita. | | |
| 1. South Boston..... | 76,072 | \$36,734 32 | \$0 4828 | \$17,367 74 | \$0 2283 | \$533 50 | \$0 0070 | \$54,635 56 | \$0 7181 |
| 2. East Boston..... | 67,162 | 12,165 02 | 0 1811 | 6,892 28 | 0 1024 | ..... | ..... | 19,047 30 | 0 2835 |
| 3. Charlestown..... | 40,494 | 32,127 96 | 0 7934 | 11,782 25 | 0 2909 | 32 50 | 0 0108 | 43,942 71 | 1 0851 |
| 4. Brighton..... | 35,567 | 16,372 42 | 0 4603 | 8,377 93 | 0 2355 | ..... | ..... | 24,750 35 | 0 6958 |
| 5. West Roxbury..... | 53,179 | 27,634 74 | 0 5196 | 14,687 88 | 0 2762 | 1,428 00 | 0 0268 | 43,750 62 | 0 8226 |
| 6. Dorchester..... | 140,952 | 54,726 00 | 0 3882 | 28,806 11 | 0 2049 | ..... | ..... | 83,616 11 | 0 5931 |
| 7. Roxbury..... | 128,546 | 102,294 25 | 0 7958 | 45,190 98 | 0 3515 | 3,173 50 | 0 0246 | 150,658 73 | 1 1719 |
| 8 and 9. South End and Back Bay..... | 116,987 | 132,627 64 | 1 1336 | 47,567 07 | 0 4066 | 31,547 60 | 0 2696 | 211,742 31 | 1 8098 |
| 10. North and West Ends..... | 85,306 | 71,399 34 | 0 8369 | 15,532 76 | 0 1830 | 7,149 95 | 0 0838 | 94,082 05 | 1 1027 |
| 12. Hyde Park..... | 17,991 | 4,083 58 | 0 2269 | 1,932 57 | 0 1074 | ..... | ..... | 6,016 15 | 0 3343 |
| Disposal from stations..... | ..... | 73,071 91 | ..... | 71,847 86 | ..... | 1,847 86 | ..... | 146,767 63 | ..... |
| Totals..... | 762,256 | \$563,237 18 | ..... | \$270,050 43 | ..... | \$45,712 91 | ..... | \$879,009 52 | ..... |

Force Employed on House Dirt and Ashes January 31, 1917.

| CITY FORCE. | Number. | Hired Teams. | CONTRACTORS' TEAMS. | | | | | Total. |
|-----------------|---------|--------------|---------------------|-----------|---------------|-------------|------------|--------|
| | | | East Boston. | Brighton. | West Roxbury. | Dorchester. | Hyde Park. | |
| Inspectors..... | 28 | | | | | | | 28 |
| Teamsters..... | 88 | 62 | 4 | 7 | 3 | 12 | 2 | 178 |
| Helpers..... | 92 | 130 | 9 | 9 | 4 | 38 | 3 | 285 |
| Dumpers..... | 1 | | | | | | | 1 |
| Totals..... | 209 | 192 | 13 | 16 | 7 | 50 | 5 | 492 |

Force Employed on House Offal January 31, 1917.

| CITY FORCE. | Number. | Hired Teams. | CONTRACTORS' TEAMS. | | | | | Total. |
|-----------------|---------|--------------|---------------------|-----------|---------------|-------------|------------|--------|
| | | | East Boston. | Brighton. | West Roxbury. | Dorchester. | Hyde Park. | |
| Inspectors..... | 11 | | | | | | | 11 |
| Teamsters..... | 43 | 5 | 3 | 7 | 4 | 9 | 2 | 73 |
| Helpers..... | 49 | 9 | 6 | 7 | 4 | 9 | 2 | 86 |
| Totals..... | 103 | 14 | 9 | 14 | 8 | 18 | 4 | 170 |

Force Employed on Waste and Rubbish January 31, 1917.

| CITY FORCE. | Number. |
|-----------------|---------|
| Inspectors..... | 1 |
| Teamsters..... | 16 |
| Helpers..... | 26 |
| Total..... | 43 |

Amount of House Dirt and Ashes Removed.

| YEARS. | Loads. | Cubic Yards. | Tons. |
|-----------|---------|--------------|---------|
| 1912..... | 282,190 | 781,140 | 368,327 |
| 1913..... | 269,982 | 715,928 | 337,560 |
| 1914..... | 273,405 | 760,848 | 358,740 |
| 1915..... | 262,235 | 748,992 | 353,138 |
| 1916..... | 238,261 | 795,862 | 324,313 |

Amount of House Offal Removed.

| YEARS. | Loads. | Cubic Yards. | Tons. |
|-----------|--------|--------------|----------|
| 1912..... | 49,102 | 108,832 | 73,462 |
| 1913..... | 54,873 | * 124,302 | † 83,903 |
| 1914..... | 51,523 | 112,847 | 76,172 |
| 1915..... | 50,482 | 113,348 | 76,511 |
| 1916..... | 48,329 | 118,770 | 70,075 |

* Less 19,232.

† Less 12,982, error in Dorchester district.

Amount of Waste and Rubbish Removed.

| YEARS. | LOADS. | | Cubic Yards. | Tons. |
|-----------|--------------|----------------|--------------|--------|
| | Paper Carts. | Market Wagons. | | |
| 1912..... | 1,308 | 5,490 | 66,598 | 8,632 |
| 1913..... | 1,174 | 7,812 | 75,257 | 9,747 |
| 1914..... | 1,691 | 8,722 | 82,978 | 10,778 |
| 1915..... | 2,212 | 6,948 | 70,779 | 9,192 |
| 1916..... | 4,302 | 7,031 | 79,909 | 10,744 |

Number of Loads of Material Collected from February 1, 1912, to January 25, 1917.

| YEARS. | Ashes. | Offal. | Rubbish. | Total Loads. | Tons. |
|-----------|---------|--------|----------|--------------|-----------|
| 1912..... | 282,190 | 49,107 | 6,798 | 338,095 | 450,421 |
| 1913..... | 269,982 | 54,873 | 8,986 | 338,841 | * 431,220 |
| 1914..... | 273,405 | 51,523 | 10,413 | 335,341 | 445,690 |
| 1915..... | 262,235 | 50,482 | 9,160 | 321,877 | 438,841 |
| 1916..... | 238,261 | 48,329 | 11,333 | 297,923 | 405,132 |

Capacity of Carts and Wagons in Use by the Sanitary Service.

| | Pounds. | Cubic Feet. |
|-------------------------------------|---------|-------------|
| Single ash carts..... | 2,037 | 67.5 |
| Double ash carts (city)..... | 3,270 | 108 |
| Double ash carts (contractors)..... | 4,075 | 135 |
| Paper carts..... | 1,400 | 146 |
| Paper wagons..... | 2,200 | 219 |
| Single offal wagons..... | 2,360 | 54 |
| Double offal wagons..... | 4,130 | 94 |
| Auto..... | 8,150 | 270 |

* Less 12,982 tons, error in Dorchester district.

Loads Collected by Contractors.

| Districts. | Ash Loads. | | | Paper Cars. | Paper Wagons. | Cubic Yards. | Tons. | | Total Tons Ashes and Paper. | Offal Loads. | | | | |
|-------------------|------------|--------|--------------|-------------|---------------|--------------|---------|--------|-----------------------------|--------------|---------|--------|--------------|--------|
| | Double. | Autos. | Cubic Yards. | | | | Ashes. | Paper. | | Single. | Double. | Autos. | Cubic Yards. | |
| | | | | | | | | | | | | | | |
| East Boston..... | 10,740 | ..... | 53,700 | ..... | ..... | ..... | 21,883 | ..... | 21,883 | ..... | 1,506 | ..... | 5,271 | 3,109 |
| Brighton..... | 14,397 | ..... | 57,588 | ..... | ..... | ..... | 23,467 | ..... | 23,467 | ..... | 2,565 | ..... | 8,978 | 5,299 |
| West Roxbury..... | 7,149 | ..... | 28,596 | ..... | ..... | ..... | 11,653 | ..... | 11,653 | ..... | 1,391 | ..... | 4,868 | 2,872 |
| Dorchester..... | 29,058 | 3,633 | 152,562 | 548 | 527 | 7,230 | 62,172 | 964 | 63,136 | 97 | 5,552 | ..... | 19,626 | 11,580 |
| Hyde Park..... | 3,019 | ..... | 12,076 | ..... | ..... | ..... | 4,921 | ..... | 4,921 | 195 | 181 | 211 | 2,711 | 1,900 |
| Totals..... | 64,363 | 3,633 | 304,522 | 548 | 527 | 7,230 | 124,096 | 964 | 125,060 | 292 | 11,195 | 211 | 36,013 | 24,460 |

Summary.

| MATERIAL. | | |
|-------------|--------------|---------|
| | Cubic Yards. | Tons. |
| Ashes..... | 304,522 | 124,096 |
| Offal..... | 36,013 | 24,460 |
| Paper..... | 7,230 | 964 |
| Totals..... | 350,765 | 149,520 |

Loads and Tonnage of Material Collected by Districts.

| Class of Refuse. | 1. South Boston. | 2. East Boston. | 3. Charlestown. | 4. Brighton. | 5. West Roxbury. | 6. Dorchester. | 7. Roxbury. | 8-9. South End and Back Bay. | 10. North and West Ends. | 11. Hyde Park. | Total Tons, (2,000 Pounds). | Total Loads. | Cubic Yards. |
|-----------------------|------------------|-----------------|-----------------|--------------|------------------|----------------|-------------|------------------------------|--------------------------|----------------|--------------------------------|--------------|--------------|
| House dirt and ashes: | | | | | | | | | | | | | |
| Loads..... | 18,669 | 10,740 | 10,750 | 14,397 | 16,335 | 32,691 | 30,890 | 56,441 | 44,329 | 3,019 | ..... | 238,261 | 795,862 |
| Tons..... | 22,179 | 21,883 | 12,819 | 23,467 | 25,972 | 62,172 | 37,148 | 68,187 | 45,565 | 4,921 | 324,313 | | |
| Offal: | | | | | | | | | | | | | |
| Loads..... | 3,809 | 1,506 | 2,238 | 2,565 | 3,996 | 5,049 | 7,390 | 15,075 | 5,614 | 587 | ..... | 48,329 | 118,770 |
| Tons..... | 4,767 | 3,109 | 2,640 | 5,299 | 6,763 | 11,580 | 10,032 | 17,789 | 6,506 | 1,600 | 70,075 | | |
| Waste and rubbish: | | | | | | | | | | | | | |
| Loads..... | 279 | ..... | ..... | ..... | 301 | 1,075 | 600 | 7,098 | 1,980 | ..... | ..... | 11,333 | 79,909 |
| Tons..... | 216 | ..... | ..... | ..... | 280 | 964 | 660 | 6,709 | 1,915 | ..... | 10,744 | | |
| Totals | 22,757 | 12,246 | 12,988 | 16,962 | 20,632 | 39,415 | 38,890 | 78,614 | 51,823 | 3,607 | ..... | 297,923 | 994,641 |
| { Loads..... | | | | | | | | | | | | | |
| { Tons..... | 27,162 | 24,992 | 15,459 | 128,766 | 33,005 | 74,716 | 47,840 | 92,685 | 53,986 | 6,521 | 405,132 | | |

**Final Disposition of all Material, in Loads and Tons (2,000 Pounds),
Collected by the Sanitary Service from February 4, 1916, to
January 25, 1917.**

| CLASS OF REFUSE. | | Boston Development and Sanitary Company. | Collected and Disposed of by Contractors. | Total Number of Loads Disposed of. | Total Tons. |
|----------------------------|-------------|--|---|---------------------------------------|-------------|
| House dirt and ashes | { | 202,956 | 35,305 | 238,261 | 324,313 |
| | | 262,389 | 61,924 | ..... |  |
| Offal | { | 42,280 | 6,049 | 48,329 | 70,075 |
| | | 57,195 | 12,880 | ..... |  |
| Waste and rubbish | { | 11,333 | ..... | 11,333 | 10,744 |
| | | 10,744 | ..... | ..... |  |
| Totals { | Loads | 256,569 | 41,354 | 297,923 | 405,132 |
| | Tons | 330,328 | 74,804 | ..... |  |

NOTE.— First item, loads. Second item, tons.





Cost of Collection and Disposal of Refuse by Contract in the City of Boston for the Year 1916-17.

| Contract Districts and Population. | CHARACTER OF REFUSE. | Tons. (2,000 lbs.) | Total Tons. | Cost per Ton by Districts; Collection and Disposal. | Cost by Districts. | | | Where Disposed of. |
|------------------------------------|--|--------------------|-------------|---|--------------------|--------------|------------------------|--|
| | | | | | Cost. | Total Cost. | Total Cost per Capita. | |
| 2. (67,162) | Mixed refuse, principally ashes (no kitchen wastes)..... | 21,883 | ..... | \$0 5560 | \$12,165 02 | ..... | ..... | Inland dumps. |
| | Garbage, principally kitchen wastes..... | 3,109 | 24,992 | 2 2458 | 6,882 28 | \$19,047 30 | \$0 2836 | * |
| | | | | Av. \$0 7621 | | | | |
| 4. (35,567) | Mixed refuse, principally ashes (no kitchen wastes)..... | 23,467 | ..... | \$0 6976 | \$16,372 42 | ..... | ..... | Inland dumps. |
| | Garbage, principally kitchen wastes..... | 5,299 | 28,766 | 1 5816 | 8,377 93 | 24,750 85 | 0 6958 | * |
| | | | | Av. \$0 8951 | | | | |
| 5. (29,593) | Mixed refuse, principally ashes (no kitchen wastes)..... | 11,653 | ..... | \$0 6937 | \$8,084 24 | ..... | ..... | Inland dumps. |
| | Garbage, principally kitchen wastes..... | 2,872 | 14,525 | 1 1419 | 3,279 77 | 11,364 01 | 0 3839 | * |
| | | | | Av. \$0 7823 | | | | |
| 6. (140,952) | Mixed refuse, principally ashes (no kitchen wastes)..... | 62,172 | ..... | \$0 8802 | \$54,728 00 | ..... | ..... | Boston Development and Sanitary Company. † |
| | Garbage, principally kitchen wastes..... | 11,580 | ..... | 4 2478 | 49,190 11 | ..... | ..... |  |
| | Store refuse and paper..... | 964 | 74,716 | ..... | ..... | 103,916 11 | 0 7372 | |
| Hyde Park. (17,991) | Mixed refuse, principally ashes (no kitchen wastes)..... | 4,921 | ..... | Av. \$1 3908 | \$84,083 58 | ..... | 0 3355 | Inland dumps. |
| | Garbage, principally kitchen wastes..... | 1,600 | 6,521 | 1 2078 | *1,932 57 | 6,016 15 | ..... | * |
| | Totals..... | ..... | 149,520 | Av. \$1 1042 | ..... | \$165,093 92 | \$0 5668 | |

* Removed beyond city limits and presumably fed to swine.

† Contract for disposal.

Total, as above..... \$165,093 92

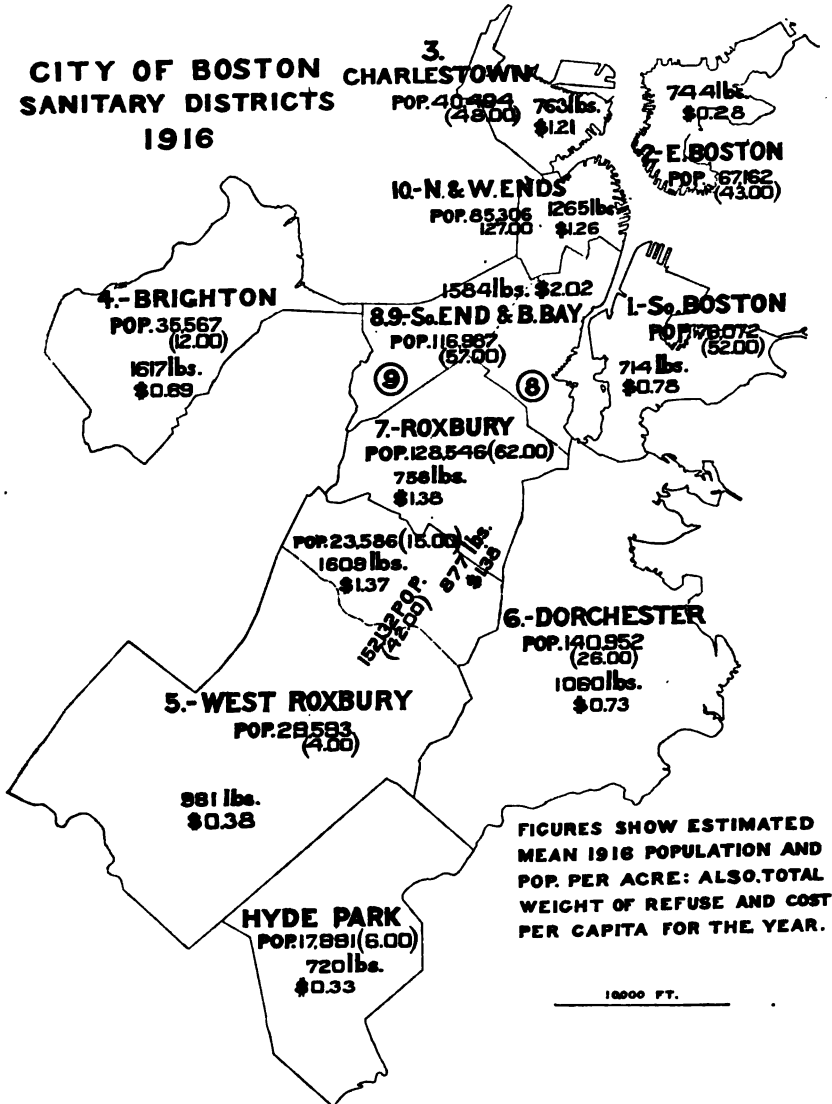
Add total of day labor table (between pages 408 and 409)..... 804,344 94

Net amount of appropriation..... \$969,438 86

**Number of Carts, Wagons and Sleds Used by the Sanitary Service for the Collection of House Dirt and Ashes, Waste,
Rubbish and Garbage During the Year Ending January 31, 1917.**

| Districts. | Asse Carts. | | | Offal Wagons. | | | | Paper. | | Sleds. | Pungs. | Contractors. |
|--------------------------------|-------------|---------|---------|---------------|---------|---------|---------|--------|---------|--------|--------|-------------------|
| | WOOD. | | | IRON. | | WOOD. | | Carts. | Wagons. | | | |
| | Autos. | Single. | Double. | Single. | Double. | Single. | Double. | | | | | |
| | | | | | | | | | | | | |
| 1. South Boston..... | 1 | 16 | ..... | 4 | ..... | 3 | 1 | 1 | 1 | 16 | ..... |  |
| 3. Charlestown..... | 1 | 14 | ..... | 5 | ..... | ..... | ..... | ..... | 1 | 9 | ..... |  |
| 7. Roxbury..... | 1 | 42 | 7 | 15 | 2 | 2 | 5 | 2 | 2 | 35 | 14 | |
| 8. Repair Shops..... | ..... | 20 | 1 | 11 | ..... | ..... | ..... | 1 | 1 | ..... | ..... |  |
| 8 and 9. South End..... | ..... | 29 | ..... | 14 | ..... | ..... | ..... | 6 | 9 | 34 | 2 | |
| 10. North and West Ends..... | ..... | 40 | ..... | 13 | ..... | ..... | ..... | 5 | 4 | 5 | ..... |  |
| Total in Sanitary Service..... | 3 | 161 | 8 | 62 | 2 | 5 | 6 | 15 | 18 | 99 | 16 | |
| In Use by Contractors. | | | | | | | | | | | | |
| 2. East Boston..... | ..... | ..... | 4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Berry & McCarthy. |
| 2. East Boston..... | ..... | ..... | ..... | ..... | 3 | ..... | 1 | ..... | ..... | ..... | ..... | II. H. Cannon. |
| 4. Brighton..... | ..... | 4 | 10 | ..... | ..... | ..... | ..... | 1 | 1 | ..... | ..... | J. McGreevey. |
| 4. Brighton..... | ..... | ..... | ..... | ..... | 1 | ..... | 10 | ..... | ..... | ..... | ..... | J. A. & W. Janse. |
| 5. West Roxbury..... | ..... | ..... | 4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | J. J. Moore. |
| 5. West Roxbury..... | ..... | ..... | ..... | ..... | ..... | ..... | 6 | ..... | ..... | ..... | ..... | W. Griffin. |
| 6. Dorchester..... | ..... | ..... | 22 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | F. Gore Company. |
| 6. Dorchester..... | 1 | ..... | ..... | ..... | 7 | ..... | ..... | ..... | ..... | ..... | ..... | M. H. Loonie. |
| 11. Hyde Park..... | ..... | ..... | 2 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | J. J. Moore. |
| 11. Hyde Park..... | ..... | ..... | ..... | ..... | ..... | 2 | ..... | ..... | ..... | ..... | ..... | C. Tate. |
| Totals..... | 4 | 165 | 50 | 62 | 13 | 7 | 28 | 15 | 19 | 99 | 16 | |

**CITY OF BOSTON
SANITARY DISTRICTS
1916**



HIGHWAY DIVISION — STREET CLEANING AND OILING SERVICE.

Items of Expenditures for the Year. *Street Cleaning Branch.*

| | | |
|---|-------------|-------------|
| General administration | | \$25,573 00 |
| Salary of division engineer (in part), | \$682 24 | |
| Salary of supervisor (in part) | 1,431 00 | |
| Salary of medical inspector (in part), | 491 02 | |
| Salary of general foreman | 239 75 | |
| Medical service | 86 50 | |
| Salary of chief veterinarian (in part), | 820 00 | |
| Stationery | 178 43 | |
| Postage | 112 21 | |
| Printing | 875 12 | |
| Advertising | 7 50 | |
| Telephone service | 623 72 | |
| Office items and incidentals | 205 59 | |
| Automobile repairs and maintenance, supervisor | 1,732 31 | |
| Supplies | \$66 84 | |
| Garage rent | 180 00 | |
| Gasolene, oil, etc. | 305 42 | |
| Tubes, tires, cases, new | 36 24 | |
| Tubes, tires, cases, repair of | 25 60 | |
| Engine and body repairs | 386 47 | |
| Registration | 20 00 | |
| Wages of chauffeur, | 1,092 00 | |
| Total | \$2,112 57 | |
| Less amount charged to Street Watering and Oiling | 380 26 | |
| Annuity, chapter 569, Acts of 1898, | 300 00 | |
| Pensions, retired veterans | 5,952 54 | |
| Pensions, retired laborers | 10,576 47 | |
| Uniforms | 1,258 60 | |
| Carried forward | \$25,573 00 | \$25,573 00 |

| | | |
|---|-------------|-------------|
| <i>Brought forward</i> | \$25,573 00 | \$25,573 00 |
| General expenses, other than general administration | | 104,669 11 |
| Wages of stablemen | \$28,365 65 | |
| Wages of yardmen | 5,220 45 | |
| Wages of watchmen | 3,731 00 | |
| Wages of foremen's drivers | 538 15 | |
| Wages of yard clerks and messengers, | 2,966 75 | |
| Veterinary services and medicines | 376 80 | |
| Hay and straw | 20,681 21 | |
| Grain | 18,721 96 | |
| Wagons and carriages, repairs | 678 46 | |
| Harnesses, new and repairs | 2,398 31 | |
| Horseshoeing | 4,731 54 | |
| Horses, new | 2,837 50 | |
| Horses, clipping of | 56 94 | |
| Horses, outside care and board of | 1,706 25 | |
| Stables and yards, rent of | 2,670 00 | |
| Stables and yards, taxes on | 1,101 12 | |
| Stables and yards, blankets, coverings, brushes, oils, greases, polishes, furnishings | 1,911 97 | |
| Stable and yards, buildings, repairs, | 4,076 11 | |
| Electric light, stable and yards | 460 66 | |
| Gas light, stable and yards | 18 23 | |
| Fuel, stable and yards | 305 20 | |
| Automobile repairs and maintenance, | 1,114 85 | |

| FOREMEN. | No. 100137 8389 | No. 6043 | No. 6042 |
|--|-----------------------|-------------|-------------|
| Cost..... | \$361 60 | | |
| Registration..... | 15 00 | \$10 00 | \$10 00 |
| Supplies..... | 35 90 | 1 00 | 29 00 |
| Parts..... | 1 40 | 23 33 | 120 46 |
| Labor..... | 6 25 | 24 20 | 64 95 |
| Gasolene,oils, greases, etc..... | 21 80 | 87 28 | 232 16 |
| Tubes, tires, cases, new..... | 25 55 | 30 67 | 4 40 |
| Tubes, tires, cases, repair of..... | | 4 15 | 5 75 |
| Totals..... | \$467 50 | \$180 63 | \$466 72 |

| | | |
|---|--------------|--------------|
| Operating expenses | | 420,468 05 |
| District foremen, salaries of | \$17,950 40 | |
| Subforemen, wages of, on paved streets, gutters, crossings, snow work, patrolling, etc. | 28,496 60 | |
| Laborers, wages of, on paved streets, gutters, crossings, snow work, patrolling, etc | 248,885 42 | |
| <i>Carried forward</i> | \$425,574 53 | \$550,710 16 |

| | | |
|---|--------------|--------------|
| <i>Brought forward</i> | \$425,574 53 | \$550,710 16 |
| Hired teams on paved streets, gutters, crossings, snow work, patrolling, etc. | 49,274 19 | |
| Holiday, pay allowed | 24,640 05 | |
| Vacations | 13,115 35 | |
| Pay allowed injured employees | 2,894 30 | |
| Military roll (service at Mexican border) | 345 00 | |
| Dumps, labor on | 3,087 44 | |
| Dumps, rent of | 3,673 32 | |
| Snow license (part cost) | 500 00 | |
| Flushing machines, new and repairs, | 2,599 17 | |
| Sweeping machines, repairs | 1,769 26 | |
| Water carts, repairs | 1,440 53 | |
| Cart repairs | 5,953 91 | |
| Snow plows, road machines, etc., new and repairs | 1,507 85 | |
| Push brooms, team brooms, handles, etc. | 1,445 34 | |
| Hoes, shovels, picks, etc. | 1,384 92 | |
| Machine brooms | 3,879 00 | |
| Push carts and barrels | 497 76 | |
| Refuse boxes | 356 44 | |
| Sand (used on slippery streets) | 682 13 | |
| Hose for flushing machines | 563 96 | |
| Hose for watering carts | 102 42 | |
| Calcium chloride for watering streets, | 20 48 | |
| Tools, etc., repairs | 548 29 | |
| Automobile, repairs and maintenance, | 4,854 52 | |

| | No. 1431. |
|---------------------------------------|------------|
| Garage rent | \$360 00 |
| Gasoline, oils, greases, etc. | 1,127 20 |
| Engine and body repairs | 794 20 |
| Tubes, tires, cases, new | 437 20 |
| Supplies | 16 11 |
| Registration | 2 00 |
| Chauffeurs | 1,542 00 |
| Total | \$4,278 71 |

Proportionate share of truck No.
1432 \$575 81

| | | |
|-----------------------------|--------------|--------------|
| Total expenditure | \$550,710 16 | \$550,710 16 |
|-----------------------------|--------------|--------------|

Street Watering and Oiling Branch.

| | | |
|--|----------|------------|
| General administration | | \$4,360 66 |
| Salary of division engineer (in part), | \$149 76 | |
| Salary of supervisor (in part) | 314 12 | |
| Salary of general foreman | 1,795 04 | |

| | | |
|----------------------------------|------------|------------|
| <i>Carried forward</i> | \$2,258 92 | \$4,360 66 |
|----------------------------------|------------|------------|

PUBLIC WORKS DEPARTMENT.

415

| | | |
|--|------------|------------|
| <i>Brought forward</i> | \$2,258 92 | \$4,360 66 |
| Salary of medical inspector (in part), | 9 00 | |
| Salary of chief veterinarian (in part), | 180 00 | |
| Stationery | 44 61 | |
| Printing | 97 82 | |
| Postage | 28 05 | |
| Advertising | 9 50 | |
| Telephone service | 46 15 | |
| Traveling expense | 1 25 | |
| Analyses of oils | 170 00 | |
| Incidentals | 42 00 | |
| Proportionate share of supervisor's automobile | 380 26 | |
| Automobile repairs and maintenance, | 1,090 40 | |

| GENERAL FOREMAN. | No. 6382. |
|-----------------------------------|------------|
| Garage rent..... | \$180 00 |
| Gasolene, oils, greases, etc..... | 448 86 |
| Engine and body repairs..... | 306 54 |
| Tubes, tires, cases, new..... | 94 60 |
| Tubes, tires, cases, repairs..... | 23 27 |
| Supplies..... | 22 13 |
| Registration..... | 15 00 |
| Total..... | \$1,090 40 |

| | | |
|---|----------|----------|
| Uniforms | 2 70 | |
| General expenses other than general administration | | 2,230 62 |
| Wages of stablemen, watchmen and yardmen | \$511 08 | |
| Veterinary services and medicines | 6 95 | |
| Hay, straw and grain | 616 40 | |
| Wagons and carriages, repairs | 3 96 | |
| Horseshoeing | 127 40 | |
| Yard and stables, blankets, covers, brushes, oils, greases, polishes, furnishings | 177 70 | |
| Yard and stables, buildings, repairs, | 207 53 | |
| Light and fuel, yard and stables | 117 36 | |
| Bicycles, repairs | 4 00 | |
| Chief inspector, automobile repairs and maintenance | 458 24 | |

| CHIEF INSPECTOR. | No. 6381. |
|-----------------------------------|-----------|
| Registration..... | \$10 00 |
| Supplies..... | 20 05 |
| Gasolene, oils, greases, etc..... | 265 03 |
| Engine and body repairs..... | 91 57 |
| Tubes, tires, cases, new..... | 59 74 |
| Tubes, tires, cases, repairs..... | 11 85 |
| Total..... | \$458 24 |

| | | |
|----------------------------------|------------|------------|
| <i>Carried forward</i> | \$6,591 28 | \$6,591 28 |
|----------------------------------|------------|------------|

| | | |
|--|------------|------------|
| <i>Brought forward</i> | \$6,591 28 | \$6,591 28 |
| Operating expenses | | 114,859 40 |
| Inspectors, wages, water distribu- tion | \$6,756 32 | |
| Inspectors, wages, oil distribution | 886 75 | |
| Chief inspectors | 1,092 00 | |
| Laborers, wages, water distribu- tion | 343 01 | |
| Laborers, wages, oil distribution | 376 84 | |
| Laborers, wages, calcium chloride | 108 52 | |
| Holidays, pay allowed | 69 48 | |
| Vacation | 167 50 | |
| Hired teams, water distribution | 36,313 86 | |
| Hired teams, oil distribution | 2,597 14 | |
| Hired teams, calcium chloride | 215 21 | |
| Tools | 24 50 | |
| Standpipes, repairs and mainte- nance | 1,241 80 | |
| Calcium chloride | 819 52 | |
| Road oil | 59,049 61 | |
| Sand, labor spreading | 6 38 | |
| Oil and water carts, repairs | 320 12 | |
| Rent, car sidings | 130 00 | |
| Gas pump and repairs | 487 13 | |
| Freights and demurrage | 1,036 39 | |
| Automobiles, repairs and mainte- nance | 2,817 32 | |

| | No. 1432. | No. 1433. |
|--|------------|-----------|
| Garage rent | \$330 00 | |
| Gasolene, oils, greases, etc. | 825 35 | \$18 47 |
| Engine and body repairs | 618 91 | 75 49 |
| Tubes, tires, cases, new | 346 93 | |
| Tubes, tires, cases, repairs | 75 | |
| Supplies | 16 85 | 4 13 |
| Registration | 2 00 | |
| Chauffeur and operator | 1,154 25 | |
| Totals | \$3,295 04 | \$98 09 |

Less amount charged to

Street Cleaning . . . \$575 81

Total \$121,450 68 \$121,450 68

DISTRIBUTION OF EXPENDITURES.

| | | | |
|---|--------------|--------------|---------------------|
| Removing snow | \$108,371 16 | | |
| Snow work on crossings and gutters | 13,439 72 | \$121,810 88 | |
| | | 45,497 40 | |
| Flushing streets | | | |
| Street patrolling by teams | \$18,786 85 | | |
| Street patrolling by push carts | 85,116 22 | | |
| Cleaning of subway passage | 1,131 75 | | |
| Collection of refuse boxes | 4,510 23 | 109,545 05 | |
| Cleaning of paved streets | \$198,975 80 | | |
| Cleaning of macadam gutters | 47,985 48 | | |
| Cleaning of public alleys | 789 47 | | |
| Cleaning of private alleys (infantile paralysis) | 6,082 28 | 253,833 03 | |
| Sanding of slippery streets | | 1,593 56 | \$532,279 92 |
| Purchase of new horses | | \$2,837 50 | |
| Work performed for Sanitary Service | | 15,245 72 | |
| Work performed for Sewer Service | | 347 02 | 18,430 24 |
| | | | |
| Total expenditures, Street Cleaning Branch | | | \$550,710 16 |
| Oiling of public streets and ways | | \$71,672 36 | |
| Watering of public streets and ways | | 49,778 32 | |
| | | | |
| Total expenditures, Street Watering and Oiling Branch, | | | 121,450 68 |
| | | | |
| Total expenditures, Street Cleaning and Oiling Service, | | | <u>\$672,160 84</u> |

Summary.

| ITEMS. | STREET CLEANING BRANCH. | | | STREET OILING AND WATERING BRANCH. | | |
|---------------------------|-------------------------|--------------|--------------|------------------------------------|--------------|--------------|
| | 1914-1915. | 1915-1916. | 1916-1917. | 1914-1915. | 1915-1916. | 1916-1917. |
| Labor..... | \$390,313 34 | \$410,799 55 | \$403,167 02 | \$26,434 28 | \$28,311 16 | \$12,742 01 |
| Teaming..... | 18,565 51 | 18,047 77 | 49,274 19 | 53,814 45 | 52,406 23 | 39,126 21 |
| Supplies and repairs..... | 111,971 18 | 122,041 27 | 98,268 95 | 98,484 86 | 59,027 58 | 69,582 46 |
| Totals..... | \$520,850 03 | \$550,888 59 | \$550,710 16 | \$178,733 59 | \$139,744 97 | \$121,450 68 |

SNOW WORK.

Cost of Snow Work and Volume of Snow Removed.

| DISTRICTS. | Snow Work on Cross- ings and Gutters. Total Cost. | Snow Removal. Total Cost. * | Total Cost. * | Single Loads of Snow Removed. † | Cubic Yards Removed. † | Cost per Cubic Yard Removed. * |
|-----------------------------|---|--------------------------------------|------------------|---|---------------------------------|--|
| 1. South Boston..... | \$2,265 03 | \$3,197 73 | \$5,462 76 | 4,554 | 11,840.4 | \$0 27 |
| 2. East Boston..... | 73 08 | 803 71 | 876 79 | 510 | 1,326 | 0 606 |
| 3. Charlestown..... | 1,541 87 | 787 14 | 2,329 01 | 700 | 1,820 | 0 432 |
| 6. Dorchester..... | 376 88 | 425 10 | 801 98 | 218 | 566.8 | 0 767 |
| 7. Roxbury..... | 2,551 90 | 883 20 | 3,435 10 | 358 | 930.8 | 0 948 |
| 8. Uptown..... | 1,604 32 | 940 91 | 2,545 23 | 655 | 1,703 | 0 552 |
| 8. Downtown..... | 539 25 | 36,813 61 | 37,352 86 | 30,996 | 80,589.6 | 0 456 |
| 9. Back Bay..... | 214 09 | 3,189 78 | 3,403 87 | 2,190 | 5,694 | 0 56 |
| 10. North and West Ends.... | 493 03 | 34,055 18 | 34,548 21 | 30,506 | 79,315.6 | 0 429 |
| 11. Patrol System..... | 3,780 27 | 27,274 80 | 31,055 07 | 12,766 | 33,191.6 | 0 821 |
| Totals..... | \$13,439 72 | \$108,371 16 | \$121,810 88 | 83,453 | 216,977.8 | |
| Average..... | | | | | | \$0 499 |

* Includes Sundays paid time and one half, holidays double time.

† Street Cleaning Branch loads, 2.6 cubic yards.

Summary.

| ITEMS. | Cost of Inspection, Labor and Teaming. | Cost of all Other Charges. | Total Cost. | AMOUNT OF SNOW REMOVED. | | Cost per Load Removed. | Cost per Cubic Yard Removed. |
|--------------------------------------|---|----------------------------------|--------------|-------------------------------|-----------------|------------------------------|---------------------------------------|
| | | | | Loads. | Cubic Yards. | | |
| Snow removal..... | \$78,234 51 | \$30,136 65 | \$108,371 16 | 83,453 | 216,977.8 | \$1.298 | \$0.499 |
| Snow crossings and gut- ters..... | 11,607 85 | 1,831 87 | 13,439 72 | ..... | ..... | ..... | ..... |
| Totals..... | \$89,842 36 | \$31,968 52 | \$121,810 88 | | | | |

Flushing.

| Cost of Supervision. | Cost of Labor and Teams. | Cost of Repairs and Tools. | Cost of All Other Charges. | * Total Cost. | Square Yards Flushed Once. | Total Gallons of Water Used. | Gallons of Water Used per Square Yard. | Cost per Thousand Square Yards Flushed Once. |
|----------------------|--------------------------|----------------------------|----------------------------|---------------|----------------------------|------------------------------|--|--|
| \$2,417 05 | \$27,583 47 | \$3,399 26 | \$12,097 62 | \$45,497 40 | 89,693,315 | 20,275,532 | .226 | \$0.5072 |

* Cost of water not included.

Cost of Maintaining Horses on a Basis of 365 Days Per Year.

| Districts. | SOUTH BOSTON. | | EAST BOSTON. | | CHARLESTOWN. | | DORCHESTER. | | ROXBURY. | | SOUTH STABLE. | | WEST STABLE. | | TOTAL. |
|--|---------------|--------------------|--------------|--------------------|--------------|--------------------|-------------|--------------------|-------------|--------------------|---------------|--------------------|--------------|--------------------|-------------|
| AVERAGE NUMBER HORSES KEPT. | 20.64 | | 14.76 | | 12.3 | | 14.86 | | 22.00 | | 61.13 | | 32.3 | | 176.49 |
| Items. | TOTAL COST. | | TOTAL COST. | | TOTAL COST. | | TOTAL COST. | | TOTAL COST. | | TOTAL COST. | | TOTAL COST. | | TOTAL COST. |
| | Per Year. | Per Horse per Day. | Per Year. | Per Horse per Day. | Per Year. | Per Horse per Day. | Per Year. | Per Horse per Day. | Per Year. | Per Horse per Day. | Per Year. | Per Horse per Day. | Per Year. | Per Horse per Day. | Per Year. |
| Labor..... | \$4,303 76 | \$0 5711 | \$2,918 26 | \$0 5418 | \$1,793 38 | \$0 4001 | \$3,346 50 | \$0 617 | \$3,389 51 | \$0 421 | \$11,396 11 | \$0 5107 | \$5,165 00 | \$0 4314 | \$32,312 52 |
| Hay and grain..... | 4,525 15 | 0 6005 | 2,564 50 | 0 4716 | 1,841 33 | 0 4108 | 2,613 14 | 0 4818 | 4,636 94 | 0 5756 | 15,637 75 | 0 7008 | 8,200 76 | 0 6848 | 40,019 57 |
| Fuel, light and rent.. | 1,047 95 | 0 1391 | 2,020 49 | 0 3751 | 96 91 | 0 0216 | 93 34 | 0 0172 | 211 74 | 0 0262 | 124 70 | 0 0055 | ..... | ..... | 3,595 13 |
| Yard and stable repairs..... | 76 62 | 0 0101 | 50 | ..... | 122 67 | 0 0275 | 2,878 31 | 0 5307 | 173 78 | 0 0215 | 434 25 | 0 0194 | 184 13 | 0 0153 | 3,870 26 |
| Yard and stable furnishings..... | 97 25 | 0 0126 | 250 19 | 0 0464 | 64 20 | 0 0143 | 120 65 | 0 0222 | 195 56 | 0 0282 | 758 10 | 0 034 | 410 95 | 0 343 | 1,806 90 |
| Veterinary services and medicines..... | 146 00 | 0 0193 | 90 50 | 0 0168 | 72 00 | 0 016 | ..... | ..... | 4 52 | 0 0005 | 15 18 | 0 0007 | 55 56 | 0 0045 | 393 76 |
| Horsehoesing..... | 851 26 | 0 1129 | 688 45 | 0 1278 | 611 95 | 0 1365 | 500 20 | 0 0922 | 682 47 | 0 0847 | * 2,887 50 | 0 1265 | * 1,216 35 | 0 1016 | 7,418 18 |
| Outside care and board..... | ..... | ..... | ..... | ..... | ..... | ..... | 1,706 25 | 0 3146 | ..... | ..... | ..... | ..... | ..... | ..... | 1,706 25 |
| Miscellaneous..... | 3 00 | 0 0003 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 54 00 | 0 0024 | ..... | ..... | 57 00 |
| Totals..... | \$11,050 99 | \$1 466 | \$8,532 80 | \$1 5842 | \$4,602 44 | \$1 0268 | \$11,258 39 | \$2 076 | \$9,294 52 | \$1 158 | \$31,287 50 | \$1 402 | \$15,232 75 | \$1 2721 | \$91,269 57 |

* Work done by Sanitary Service — not paid for by Street Cleaning Service.

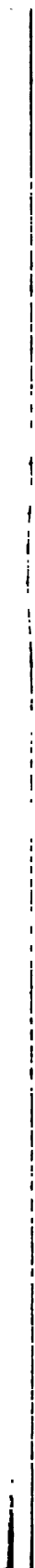
Push Cart, Team and Box Patrols and Collections.

| DISTRICTS. | TEAM PATROL. | | | | | PUSH CART COLLECTION. | | | | | | | |
|-----------------|--------------------------------------|-----------------------|-------------|----------------------------------|---|-------------------------------|--------------------------------------|-----------------------|-------------|-----------------------|------------------------------|----------------------------------|--------------------------------------|
| | Inspection, Labor and Teaming. | All Other Charges. | Total Cost. | Number of Loads Collected. | Number of Cubic Yards Collected. | Cost per Cubic Yard. | Inspection, Labor and Teaming. | All Other Charges. | Total Cost. | Barrels Collected. | Cubic Yards Collected. | Cost per Barrel Collected. | Cost per Cubic Yard Collected. |
| 1..... | \$228 22 | \$117 82 | \$344 04 | 68½ | 137 | \$2 51½ | \$2,649 91 | \$332 62 | \$3,012 33 | 5,418 | 602 | \$0 555 | \$5 003 |
| 2..... | 176 34 | 181 51 | 357 85 | 71 | 142 | 2 52 | 1,532 46 | 157 53 | 1,689 99 | 2,590 | 288 | 0 652 | 5 868 |
| 3..... | 251 47 | 89 81 | 341 28 | 77½ | 155 | 2 20½ | 1,002 91 | 88 53 | 1,091 44 | 1,394 | 154 | 0 788 | 7 087 |
| 6..... | 357 77 | 179 65 | 537 42 | 81 | 162 | 3 31½ | 59 98 | 15 61 | 75 59 | 163 | 19 | 0 463 | 3 978 |
| 7..... | 248 62 | 225 79 | 474 41 | 107 | 334 | 1 42 | 7,438 32 | 951 84 | 8,390 16 | 15,894 | 1,765 | 0 528 | 4 753 |
| 8. Uptown..... | 1,161 76 | 541 92 | 1,703 68 | 387 | 774 | 2 20½ | | | | | | | |
| 8. Downtown.... | 92 96 | 27 06 | 120 02 | 46 | 92 | 1 304 | | | | | | | |
| 9..... | 32 66 | 143 71 | 226 37 | 45 | 90 | 2 51½ | | | | | | | |
| 10..... | 60 46 | 21 20 | 81 66 | 37 | 74 | 1 103 | | | | | | | |
| 11..... | 8,996 05 | 5,604 07 | 14,600 12 | 3,318 | 6,636 | 2 20 | 64,019 39 | 6,837 32 | 70,856 71 | 81,812 | 9,090 | 0 866 | 7 795 |
| Totals..... | \$11,654 31 | \$7,132 54 | \$18,786 85 | 4,298 | 8,596 | | \$70,702 77 | \$8,413 45 | \$85,116 22 | 107,251 | 11,917 | | |
| Averages..... | | | | | | \$2 185 | | | | | | \$0 793 | \$7 142 |

Subway patrol \$1,131 75
 Refuse box collection 4,510 23
 Sanding streets 1,593 56
 Number of loads of sand spread 560
 Number of refuse boxes collected 49,374
 Capacity of barrel:
 Metal 3 cubic feet

Miles and Areas of Streets Cared for, 1916-17.

| DISTRICT No. | Location. | MILES OF STREET CARED FOR. | | SQUARE YARDS CARED FOR. | | Total Square Yards. |
|--------------|-------------------------|-------------------------------|----------|----------------------------|-------------------------------|---------------------------|
| | | Paved. | Macadam. | Roadway Paved. | Macadam 9-foot Gutters. | |
| 1..... | South Boston..... | 23.74 | 30.08 | 439,974 | 158,856 | 648,830 |
| 2..... | East Boston..... | 6.34 | 23.28 | 142,984 | 122,969 | 265,953 |
| 3..... | Charlestown..... | 13.06 | 10.88 | 302,056 | 57,486 | 359,542 |
| 6..... | Dorchester (part)..... | 9.46 | 84.50 | 197,712 | 446,172 | 643,884 |
| 7..... | Roxbury..... | 20.09 | 19.67 | 465,278 | 103,905 | 569,183 |
| 8..... | South End (uptown)..... | 15.79 | 11.96 | 343,899 | 63,171 | 407,070 |
| 8..... | South End (downtown)... | 25.40 | .92 | 502,601 | 4,903 | 507,504 |
| 9..... | Back Bay..... | 15.74 | 20.37 | 285,067 | 107,575 | 392,642 |
| 10..... | North and West Ends.... | 19.79 | .86 | 362,362 | 4,562 | 366,924 |
| Totals..... | ..... | 149.41 | 202.52 | 3,091,933 | 1,069,599 | 4,161,532 |



OILING OF MACADAM STREETS.
Showing Cost of Labor, Teaming, Oil, etc., Including Superintendence.

| Districts. | Number. | Total Area Oiled. (Square Yards). | Equivalent Millage, 30-foot Roadway. | Area Covered Once (Square Yards). | DATES OF OILING. | | Average Number of Times Dis- trict Treated. | Total Cost. | Cost per Square Yard. | | Gallons Used. | Gallons per Square Yard of Oiled Area. | Total Water Used (Gallons). |
|---|---------|--------------------------------------|--|---|------------------|-------------------|---|--------------------|--------------------------|-------------------|------------------|---|--------------------------------|
| | | | | | First. | Last. | | | Covered Once. | Entire Season. | | | |
| South Boston..... | 1 | 501,225 | 28.4786 | 1,319,323 | 1916. May 2 | 1916. Sept. 25 | 2.6321 | \$6,527 65 | \$0 0049 | \$0 0130 | 80,679 | .1610 | 90,942 |
| East Boston..... | 2 | 392,394 | 22.2951 | 733,074 | May 8 | Sept. 20 | 1.8681 | 5,733 87 | 0074 | 0138 | 70,356 | .1793 | ..... |
| Charlestown..... | 3 | 127,645 | 7.2525 | 229,290 | May 3 | Aug. 7 | 1.7963 | 1,925 24 | 0084 | 0151 | 22,291 | .1747 | ..... |
| Brighton..... | 4 | 682,033 | 38.7518 | 1,316,386 | May 13 | Oct. 27 | 1.9300 | 6,336 93 | 0048 | 0083 | 80,103 | .1174 | 102,147 |
| West Roxbury..... | 5 | 1,008,349 | 57.3925 | 1,927,198 | May 5 | Oct. 5 | 1.9112 | 10,077 09 | 0052 | 0100 | 127,803 | .1267 | 216,996 |
| Dorchester..... | 6-9 | 1,379,070 | 78.3562 | 2,544,978 | May 2 | Oct. 4 | 1.8454 | 15,049 90 | 0059 | 0106 | 189,493 | .1374 | 211,788 |
| Roxbury..... | 7 | 971,778 | 55.2146 | 1,761,048 | May 1 | Oct. 4 | 1.8122 | 12,776 64 | 0073 | 0131 | 149,988 | .1543 | 147,819 |
| South End, Back Bay and part of Roxbury..... | 8-10 | 706,671 | 40.1517 | 1,759,048 | May 2 | Oct. 19 | 2.4962 | 9,155 50 | 0052 | 0133 | 112,493 | .1589 | 194,265 |
| Hyde Park..... | 11 | 498,971 | 28.3506 | 840,729 | May 9 | Oct. 3 | 1.6848 | 4,053 20 | 0048 | 0063 | 45,023 | .0802 | 83,010 |
| Totals..... | | 6,268,136 | 356.1436 | 12,431,074 | ..... | ..... | 17.9693 | \$71,636 03 | \$0 0536 | \$0 1078 | 878,229 | 1.2699 | 1,046,967 |
| Average..... |  |  |  |  | ..... | ..... | 1.9832 | | \$0 0057 | \$0 0114 | | .1401 | |

NOTE.—Average cost of oil per gallon, 1916, \$0.0672.

NOTE.—Average cost of oil per gallon, 1915, \$0.0410.

NOTE.—Cost of 1 square yard for season, \$0.0142. Cost of water not included.

AREA WATERED, 1916.

Total Cost Per Square Yard and Amount of Water Used.

| DISTRICTS. | Total Square Yards Watered. | EQUIVA- LENT MILEAGE, 30-foot ROADWAY. | DATES OF WATERING. | | Number of Days One or More Carts Out. | Total Cost. | Cost per Square Yard. | Cart- days Worked. | Loads Spread During Season. | Square Yards Covered Once. | Total Gallons of Water Used. |
|--------------------------------|--------------------------------------|--|--------------------|---------|--|----------------|-----------------------------|--------------------------|--------------------------------------|-------------------------------------|---------------------------------------|
| | | | First. | Last. | | | | | | | |
| South Boston..... | 488,643 | 27.7632 | April 8 | Nov. 13 | 150 | \$4,274.56 | \$0.0087 | 682 | 10,230 | 42,966,000 | 6,138,000 |
| East Boston..... | 135,836 | 7.7178 | May 1 | Oct. 22 | 114 | 1,324.66 | 0.0087 | 128 | 1,928 | 913,600 | 104,400 |
| Charlestown..... | 240,732 | 13.6779 | April 17 | Nov. 11 | 128 | 2,259.66 | 0.0093 | 328 | 4,920 | 8,097,600 | 1,156,800 |
| Brighton..... | 84,217 | 4.7850 | April 6 | Nov. 12 | 145 | 2,789.03 | 0.0331 | 322 | 4,830 | 20,664,000 | 2,952,000 |
| West Roxbury..... | 159,571 | 9.0665 | April 3 | Nov. 12 | 145 | 3,183.45 | 0.0199 | 378 | 5,670 | 20,286,000 | 2,898,000 |
| Dorchester..... | 234,310 | 13.3130 | April 2 | Nov. 12 | 151 | 5,547.72 | 0.0236 | 704 | 10,567 | 23,814,000 | 3,402,000 |
| Roxbury..... | 164,433 | 9.3996 | April 2 | Nov. 13 | 156 | 4,927.51 | 0.0299 | 546 | 8,194 | 652,500 | 78,400 |
| South End and part of Roxbury. | 626,920 | 35.6204 | April 1 | Jan. 20 | 203 | 12,216.02 | 0.0194 | 466 | 7,003 | 44,381,400 | 6,340,200 |
| City Proper..... | 507,882 | 28.8569 | Mar. 28 | Jan. 20 | 208 | 11,818.16 | 0.0232 | 531 | 7,975 | 1,015,000 | 116,000 |
| Hyde Park..... | 54,900 | 3.1193 | April 16 | Nov. 14 | 137 | 1,401.22 | 0.0255 | 138 | 2,070 | 34,414,800 | 4,916,400 |
| | | | | | | | | | | 4,759,000 | 611,600 |
| | | | | | | | | | | 29,412,600 | 4,201,800 |
| | | | | | | | | | | 77,518,000 | 8,569,800 |
| | | | | | | | | | | 61,450,200 | 8,778,600 |
| | | | | | | | | | | 60,185,850 | 6,788,600 |
| | | | | | | | | | | 8,694,000 | 1,242,000 |
| Totals..... | 2,697,444 | 153.32 | | | 1,537 | \$49,741.99 | 2023 | 4,669 | 70,043 | 294,180,600 | 42,025,800 |
| Average..... | | | | | | | 0.0184 | 694 | 19,877 | 13,944,860 | 15,482,800 |

NOTE. — Cost of one square yard for season, \$0.0184; cost of water not included.
 NOTE. — Work done by auto trucks appears in italics.

SEWER SERVICE.

The work of the Service is carried on under chapters 28 and 40, revised ordinances 1914, and the following statutes:

Chapter 426 — 1897, as amended by 450 — 1899 and 268 — 1903.

Chapter 383 — 1903, as amended by 464 — 1907.

Chapter 550 — 1907.

Chapter 204 — 1908.

Chapter 514 — 1908.

Chapter 348 — 1912.

THE DUTIES OF THE SEWER SERVICE.

1. Preparations of plans for sewerage works.
2. Construction and maintenance of all drainage works.
3. Investigation of complaints in regard to defective drainage.
4. The granting of permits for sewer construction.
5. The preparation of plans for the assessment of the cost of sewer construction.
6. The examination of the plans of other corporations proposing to construct works in public streets with reference to their probable interference with sewerage works.

| | |
|--|------------|
| Total number of employees on pay roll January 31, 1916 | 386 |
| Total number of employees on pay roll January 31, 1917 | 379 |
| Total amount of weekly pay roll January 31, 1916 | \$8,013 27 |
| Total amount of weekly pay roll January 31, 1917 | \$7,943 61 |
| Total amount of monthly pay rolls January 31, 1916 | \$361 11 |
| Total amount of monthly pay rolls January 31, 1917 | \$508 33 |
| Total amount of monthly pension roll January 31, 1916: | |
| Veterans | \$668 13 |
| Laborers | \$689 63 |

| | |
|--|--------------|
| Total amount of monthly pension roll January 31, 1917: | |
| Veterans | \$685 55 |
| Laborers | \$697 16 |
| Average weekly pay roll, including monthly roll and exclusive of pension roll, for fiscal year . . | \$7,813 02 |
| Charged as follows: | |
| Maintenance | * \$4,108 65 |
| Sewerage works | \$2,298 17 |
| Separate systems of drainage | \$1,419 91 |
| Average number of men employed | 383 |
| Number of men on pension roll January 31, 1916: | |
| Veterans | 15 |
| Laborers | 23 |
| Number of men on pension roll January 31, 1917: | |
| Veterans | 15 |
| Laborers | 23 |
| Average number of horses maintained by the service during the year | 29 |
| Rate of wages per day to common laborers | \$2 50 |

| | |
|--|----------|
| * Includes amount charged to Bridge Service..... | \$7 50 |
| Paving Service..... | 2,165 78 |
| Street Cleaning and Oiling Service..... | 714 63 |
| Water Service..... | 107 28 |
| High Pressure Fire Service..... | 1,067 69 |
| Strandway..... | 97 50 |
| Refuse Transfer Station..... | 20 00 |

\$4,180 38

Financial Statement from February 1, 1916, to January 31, 1917.

| OBJECT. | Balances on Hand Feb. 1, 1916. | Appropriations, Loans and Transfers. | Transfers to. | Transfers from. | Total Credits. | Expenditures During the Year. | Balances on Hand Jan. 31, 1916. |
|---------------------------------|--------------------------------------|--|---------------|-----------------|----------------|-------------------------------------|---------------------------------------|
| Sewer Service..... | ..... | \$323,625 20 | \$60 00 | ..... | \$323,685 20 | \$322,199 03 | \$1,486 17 |
| Sewerage Works..... | \$233,535 53 | 600,000 00 | ..... | ..... | 833,535 53 | 560,497 46 | 273,038 07 |
| Separate systems of drainage... | 164,793 21 | 400,000 00 | ..... | ..... | 564,793 21 | 490,576 72 | 74,216 49 |
| Totals..... | \$398,328 74 | \$1,323,625 20 | \$60 00 | ..... | \$1,722,013 94 | \$1,373,273 21 | \$348,740 73 |

MAINTENANCE EXPENDITURES, FEBRUARY 1, 1916, TO
JANUARY 31, 1917.

SEWER SERVICE.

Improved Sewerage.

| | | |
|--|-------------|--------------|
| Pumping Station, Calf Pasture, inside . . . | \$51,723 22 | |
| Pumping Station, Calf Pasture, outside . . . | 12,866 19 | |
| Pumping Station, Calf Pasture, engines . . . | 24,260 03 | |
| Pumping Station, Calf Pasture, boilers . . . | 17,133 35 | |
| Pumping Station, Union Park street . . . | 5,278 67 | |
| Pumping Station, Summer street . . . | 1,077 32 | |
| Pumping Station, Hyde Park . . . | 540 00 | |
| | | \$112,878 78 |

| | | |
|--|--|-----------|
| Moon Island | | 14,348 96 |
| Main and intercepting sewers | | 23,905 99 |

\$151,133 73

Stony Brook.

| | | |
|-----------------------|--|----------|
| Maintenance | | 1,945 55 |
|-----------------------|--|----------|

Miscellaneous Maintenance Charges.

| | | |
|--|-------------|-----------|
| Cleaning catch-basins | | 38,556 88 |
| Yards and lockers | | 510 32 |
| Employed at yards | | 14,736 73 |
| Horses, carts, harnesses, etc. | \$11,873 96 | |
| Teaming | 9,339 88 | |

\$21,213 84

| | | |
|---|-----------|--|
| Less amount earned by service teams | 18,257 02 | |
|---|-----------|--|

2,956 82

| | | |
|--|----------|-----------|
| Automobiles | | 4,193 88 |
| Cleaning sewers | | 27,884 20 |
| Office salaries | | 12,183 11 |
| Office expenses | | 2,706 20 |
| Culverts, repairing and maintaining | \$58 73 | |
| Repairing department buildings | 519 45 | |
| Repairing catch-basins, South Boston | 1,968 77 | |
| Repairing catch-basins, East Boston | 1,514 59 | |
| Repairing catch-basins, Charlestown | 1,163 86 | |
| Repairing catch-basins, Brighton | 1,337 54 | |
| Repairing catch-basins, West Roxbury | 1,212 18 | |
| Repairing catch-basins, Dorchester | 2,951 92 | |
| Repairing catch-basins, Hyde Park | 67 65 | |
| Repairing catch-basins, Roxbury | 2,078 61 | |
| Repairing catch-basins, city proper | 2,320 10 | |
| Repairing sewers, South Boston | 939 72 | |
| Repairing sewers, East Boston | 876 60 | |
| Repairing sewers, Charlestown | 283 38 | |
| Repairing sewers, Brighton | 800 82 | |
| Repairing sewers, West Roxbury | 2,100 53 | |
| Repairing sewers, Dorchester | 2,448 44 | |
| Repairing sewers, Hyde Park | 142 93 | |
| Repairing sewers, Roxbury | 1,747 67 | |

Carried forward \$24,533 49 \$256,807 42

PUBLIC WORKS DEPARTMENT.

429

| | | |
|--|-------------|---------------------|
| <i>Brought forward</i> | \$24,533 49 | \$256,807 42 |
| Repairing sewers, city proper | 1,618 47 | |
| | | 28,151 96 |
| Pension roll (veterans) | | 8,020 71 |
| Pension roll (laborers) | | 8,101 97 |
| Annuities | | 751 00 |
| Fuel and oil | | 1,763 47 |
| Hardware, tools, etc. | | 1,548 39 |
| Engines and boilers | | 143 64 |
| Sundries and miscellaneous charges | | 13,077 13 |
| Damages, claims and medical attendance | | 190 00 |
| Telephones | | 327 72 |
| House connection | | 8,965 30 |
| Rubber goods | | 376 36 |
| Gatehouse, Fenway | | 412 95 |
| Stock | | 7,865 79 |
| | | <u>\$334,503 81</u> |

Credit.

| | | |
|---|-------------|---------------------|
| Stock transferred and used on construction | \$10,937 03 | |
| Rubber goods transferred and used on construction | 124 17 | |
| Fuel and oil transferred and used on construction | 1,104 81 | |
| Hardware, tools, etc., transferred and used on construction | 138 77 | |
| | | 12,304 78 |
| | | <u>\$322,199 03</u> |

Charges to Various Parties for Property Sold and for Work Done and Material Furnished.

| | |
|---|--------------------|
| T. P. McMorrow | \$10 00 |
| Cemetery Department | 1 83 |
| J. Jopin | 25 00 |
| Metropolitan Water and Sewerage Board | 13,831 25 |
| P. J. Brophy | 10 00 |
| Bay State Railway Company | 84 |
| Supply Department | 19 19 |
| High Pressure Fire Service, Public Works Department | 13 70 |
| Children's Institution | 178 85 |
| Water Service, Public Works Department | 273 56 |
| City Hospital | 60 04 |
| Boston Elevated Railway | 142 60 |
| Walworth Manufacturing Company | 674 28 |
| John McCourt & Co. | 74 00 |
| Mr. Rockman | 20 50 |
| Edison Electric Illuminating Company | 55 67 |
| Quincy Market Cold Storage Company | 509 34 |
| Employers' Liability Assurance Corporation, Limited | 79 75 |
| Martin Maguire | 17 00 |
| M. Russo Son Company | 25 00 |
| Roxbury Iron and Metal Company | 248 35 |
| Standard Oil Company | 62 40 |
| Boston Juvenile Court | 10 00 |
| J. W. Coeden Company | 5 00 |
| Boston Low Tension Wire Association | 25 00 |
| R. S. Brine Transportation Company | 27 85 |
| New England Telephone Company | 6 38 |
| Fenway Brewery | 5 00 |
| | <u>\$16,412 38</u> |
| <i>Carried forward</i> | |

| | |
|------------------------|-------------|
| <i>Brought forward</i> | \$16,412 38 |
| J. L. Pierce | 6 00 |
| Staples Coal Company | 30 73 |
| Martin Ryan | 90 25 |
| Felton Company | 226 63 |
| Boston Wharf Company | 266 16 |
| Thomas Rush | 43 18 |
| Essex Lumber Company | 5 60 |
| | <hr/> |
| | \$17,080 93 |

*Amounts Collected by City Collector for Sewer Service, February 1, 1916, to
January 31, 1917.*

| | |
|---|-------------|
| Boston Transit Commission | \$413 60 |
| Boston Elevated Railway Company | 252 27 |
| Edison Electric Illuminating Company | 55 67 |
| Public Works Department, Sanitary Service | 30 96 |
| Public Works Department, Water Service | 205 56 |
| Public Works Department, Bridge Service | 44 22 |
| Public Works Department, High Pressure Fire Service | 291 64 |
| New England Telephone & Telegraph Company | 6 38 |
| Fenway Brewery | 5 00 |
| Felton Company | 226 63 |
| Bay State Street Railway Company | 84 |
| J. Jopin | 25 00 |
| Cemetery Department | 1 83 |
| J. W. Cosden Company | 5 00 |
| Boston Low Tension Wire Company | 25 00 |
| Staples Coal Company | 30 73 |
| James L. Pierce | 6 00 |
| Supply Department | 19 19 |
| M. Russo Son | 25 00 |
| Quincy Market Cold Storage Company | 509 34 |
| Employers' Liability Assurance Corporation, Limited | 79 75 |
| Patrick Doyle | 10 00 |
| P. J. Brophy | 10 00 |
| Metropolitan Water and Sewerage Board | 6,770 20 |
| T. P. McMorow | 10 00 |
| Boston Juvenile Court | 10 00 |
| Walworth Manufacturing Company | 674 28 |
| City Hospital | 60 04 |
| Roxbury Iron and Metal Company | 248 35 |
| Standard Oil Company | 62 40 |
| John McCourt | 74 00 |
| M. McGuire | 17 00 |
| | <hr/> |
| | \$10,205 88 |

Highway Division, Sewer Service.— Maintenance Expenditure, Detail, 1916-17.

| Accounts. | Total Expendi- ture. | Labor. | Teaming. | Stock. | Contracts. | Miscellaneous. |
|--|----------------------------|------------|------------|---------|-------------|---|
| Automobiles (5)..... | \$4,193 88 | \$1,618 55 | | | | Repairs..... \$996 96 Equipment..... 723 12 Supplies..... 795 25 Fees..... 60 00 \$2,575 33 |
| Cleaning catch-basins..... | 38,556 88 | 12,604 79 | \$1,847 99 | \$30 85 | \$23,869 30 | Car fares, etc..... \$66 00 Advertising..... 4 20 Dumping..... 133 75 203 95 |
| Cleaning sewers..... | 27,894 20 | 14,538 83 | 5,265 82 | 62 15 | | Machine cleaning: Machines..... \$1,361 50 Labor..... 6,551 00 Car fares..... 4 90 8,017 40 |
| Culverts, repairing and maintaining..... | 58 73 | 58 73 | | | | Waste, etc..... \$27 53 Repairs and inspection.. 116 11 143 64 |
| Engines and boilers..... | 143 64 | | | | | |
| Employed at yards..... | 14,736 73 | 14,736 73 | | | | Coal..... \$750 53 Oil and gasoline..... 1,012 94 1,763 47 |
| Fuel and oil..... | 1,763 47 | | | | | |
| Hardware and tools..... | 1,548 39 | | | | | Hose..... \$570 95 Canvases..... 130 14 Hardware, repairs, etc.. 947 30 1,548 39 |
| House connections..... | 8,965 30 | 8,481 70 | | 77 10 | | Repairs..... \$20 42 Car fares, etc..... 386 08 406 50 |

PUBLIC WORKS DEPARTMENT.

433

| Miscellaneous, sundries..... | 13,077 13 | 11,002 20 | 1,004 13 | 283 00 | Repairs, etc. Repairing streets Car fares, etc..... | \$65 28 61 76 60 69 |
|---|--------------|--------------|-------------|-------------|---|---------------------------|
| Repairing department buildings..... | 519 45 | 106 56 | | 413 89 | | |
| Repairing catch-basins, South Boston..... | 1,968 77 | 1,548 56 | 268 30 | 151 82 | | |
| " " " East Boston..... | 1,514 59 | 1,074 43 | 246 08 | 164 08 | | |
| " " " Charlestown..... | 1,163 86 | 855 76 | 148 10 | 160 00 | | |
| " " " Brighton..... | 1,337 54 | 740 30 | 425 49 | 171 75 | | |
| " " " West Roxbury..... | 1,212 18 | 780 69 | 196 68 | 234 81 | | |
| " " " Dorchester..... | 2,951 92 | 1,665 16 | 903 64 | 383 12 | | |
| " " " Hyde Park..... | 67 65 | 8 35 | 49 30 | 10 00 | | |
| " " " Roxbury..... | 2,078 61 | 1,577 23 | 295 82 | 205 57 | | |
| " " " city proper..... | 2,320 10 | 1,057 23 | 729 73 | 533 14 | | |
| Repairing sewers, South Boston..... | 939 79 | 828 66 | 48 12 | 62 94 | | |
| " " " East Boston..... | 878 60 | 6 35 | 65 48 | 204 77 | | |
| " " " Charlestown..... | 283 38 | 182 61 | 18 26 | 89 18 | | |
| " " " Brighton..... | 800 53 | 475 15 | 65 28 | 260 39 | | |
| " " " West Roxbury..... | 2,100 53 | 1,403 44 | 165 63 | 531 46 | | |
| " " " Dorchester..... | 2,148 44 | 1,635 61 | 326 62 | 486 21 | | |
| " " " Hyde Park..... | 142 93 | 84 83 | 11 60 | 263 27 | | |
| " " " Roxbury..... | 1,747 67 | 1,266 03 | 113 35 | 444 64 | | |
| " " " city proper..... | 1,618 47 | 500 86 | 672 97 | | | |
| Pension roll, veterans and laborers..... | 16,122 68 | 16,122 68 | | | | |
| Annuities..... | 751 00 | | | | | 751 00 |
| | \$201,627 10 | \$122,898 83 | \$13,194 80 | \$11,364 97 | \$25,397 01 | \$28,771 49 |
| <i>Less Credits.</i> | | | | | | |
| Teams..... | \$18,257 02 | | | | | |
| Stock..... | 10,937 03 | | | | | |
| Rubber goods..... | 124 17 | | | | | |
| Fuel and oil..... | 1,104 81 | | | | | |
| Hardware and tools..... | 138 77 | | | | | |
| Totals..... | \$171,065 30 | \$110,964 98 | \$13,194 80 | \$427 94 | \$25,397 01 | \$31,080 57 |

187 71

Highway Division, Sewer Service.— Maintenance Expenditure, Detail, 1916-17.

| Accounts. | Total Expendi- ture. | Labor. | Con- tracts. | Teaming. | Waste. | Coal and Wood. | Oil and Gasoline. | Packing. | Valves. | Car Fares. | Stable. | Pipe Fittings and Miscel- laneous. | Towing. | Autos. |
|--|----------------------------|--------------|-----------------|----------|----------|-------------------|----------------------|----------|------------|---------------|------------|--|----------|----------|
| Pumping station, inside, Calf Pasture..... | \$51,723 22 | \$22,128 49 | ..... | \$72 50 | \$435 00 | \$24,934 98 | \$301 25 | \$131 22 | ..... | ..... | ..... | \$3,719 84 | ..... | ..... |
| Pumping station, outside, Calf Pasture..... | 12,866 19 | 10,511 03 | ..... | 132 00 | ..... | ..... | ..... | ..... | ..... | ..... | \$782 94 | 699 90 | \$335 00 | \$405 32 |
| Pumping station, engines, Calf Pasture..... | 24,260 03 | 20,544 65 | ..... | ..... | ..... | ..... | 1,089 75 | 578 22 | \$1,753 50 | ..... | ..... | 293 91 | ..... | ..... |
| Pumping station, boilers, Calf Pasture..... | 17,133 35 | 15,716 85 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1,416 50 | ..... | ..... |
| Pumping station, Union Park street..... | 5,278 67 | 3,818 04 | ..... | 25 65 | 12 75 | 282 04 | ..... | 8 10 | ..... | ..... | ..... | 1,132 09 | ..... | ..... |
| Pumping station, Summer street..... | 1,077 32 | 317 75 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 759 57 | ..... | ..... |
| Pumping station, Hyde Park... | 540 00 | 293 56 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 246 44 | ..... | ..... |
| Moon Island..... | 14,348 96 | 11,354 33 | \$900 00 | ..... | ..... | 319 00 | 10 49 | ..... | ..... | \$589 40 | 406 89 | 788 85 | ..... | ..... |
| Main and intercepting sewers.. | 24,108 05 | 18,788 08 | ..... | 227 46 | ..... | 251 40 | 28 75 | ..... | ..... | 70 20 | 1,155 48 | 3,175 34 | ..... | 411 34 |
| | \$151,335 79 | \$103,472 78 | \$900 00 | \$457 61 | \$447 75 | \$25,787 36 | \$1,430 24 | \$717 54 | \$1,753 50 | \$639 60 | \$2,345 31 | \$12,232 44 | \$335 00 | \$816 66 |
| <i>Credits.</i> | | | | | | | | | | | | | | |
| Main and intercepting sewers: | | | | | | | | | | | | | | |
| Amount earned by service teams..... | 202 06 | 127 50 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 74 56 | ..... | ..... | ..... |
| Totals..... | \$151,133 73 | \$103,345 28 | \$900 00 | \$457 61 | \$447 75 | \$25,787 36 | \$1,430 24 | \$717 54 | \$1,753 50 | \$639 60 | \$2,270 75 | \$12,232 44 | \$335 00 | \$816 66 |

Recapitulation.— Maintenance Detail, 1916-17.

| | Improved Sewerage. | Outside Improved Sewerage. | Totals. |
|---|-----------------------|----------------------------------|--------------|
| Labor..... | \$103,472 78 | \$122,898 83 | \$226,371 61 |
| Contracts..... | 900 00 | 25,397 01 | 26,297 01 |
| Teaming, hired and city..... | 457 61 | 13,194 80 | 13,652 41 |
| Waste..... | 447 75 | 27 53 | 475 28 |
| Fuel..... | 25,787 36 | 750 53 | 26,537 89 |
| Oil..... | 1,430 24 | 1,012 94 | 2,443 18 |
| Packing..... | 717 54 | ..... | 717 54 |
| Valves..... | 1,753 50 | ..... | 1,753 50 |
| Car fares, traveling expenses, etc..... | 639 60 | 522 57 | 1,162 17 |
| Horses, etc..... | 2,345 31 | 8,749 62 | 11,094 93 |
| Towing..... | 335 00 | ..... | 335 00 |
| Pipe fittings and miscellaneous..... | 12,232 44 | ..... | 12,232 44 |
| Telephone..... | ..... | 327 72 | 327 72 |
| Automobiles, repairs and supplies..... | 816 66 | 2,575 33 | 3,391 99 |
| Stock and miscellaneous supplies..... | ..... | 26,170 22 | 26,170 22 |
| | \$151,335 79 | \$201,627 10 | \$352,962 89 |
| CREDITS. | | | |
| <i>Improved Sewerage.</i> | | | |
| Labor..... | \$127 50 | | |
| Stables..... | 74 56 | | |
| | 202 06 | | |
| <i>Outside Improved Sewerage.</i> | | | |
| Miscellaneous..... | \$7,690 92 | | |
| Labor..... | 11,933 85 | | |
| Stock..... | 10,937 03 | | |
|  | ..... | 30,561 80 | 30,763 86 |
| | \$151,133 73 | \$171,065 30 | \$322,199 03 |

WASTE.
3,700 pounds at 9½ to 13½ \$447 75

COAL.
5,138.730 tons soft coal..... \$24,934 92
126 tons hard coal..... 852 44
\$25,787 36

TOWING.
Boston Tow Boat Company... \$335 00

PACKING.
764¾ pounds at 40c. to \$1.80, \$717 54

OIL.
2,833 gallons of engine at.... 17½c. to 23c.
662 gallons cylinder at.... 20c. to 28c.
355 gallons gargyle at.... 35c.
10% discount.
104 gallons sperm at..... 74c. to 84c.
30 gallons lard at..... \$1.
49½ gallons turbine at.... 28c.
2,938 pounds grease at..... 8½c. to 9c.
500 gallons kerosene at.... 6c. to 8c.
324 gallons gasolene at.... 12c. to 26c.

Highway Division, Sewer Service.—Maintenance Expenditure, Detail, 1916-17.—Concluded.

| Accounts. | Total Expendi- ture. | Labor. | Teaming. | Stock. | Contracts. | Miscellaneous. |
|---|----------------------------|------------|----------|------------|------------|--|
| Horses, carts, harnesses, etc..... | \$11,873 96 | \$3,124 34 | | | | Fodder..... \$4,665 50 New horses..... 2,005 00 Stable goods..... 87 17 Veterinary services..... 46 50 Repairs, wagons and har- nesses..... 670 61 Shoeing..... 1,101 30 Board..... 121 00 Cleaning..... 27 69 New wagons and har- nesses..... 14 85 \$8,749 62 |
| Maintenance, Stony brook..... | 1,945 55 | 1,768 74 | \$176 81 | | | Postage and printing..... \$579 89 |
| Office expenses..... | 2,706 20 | | | | | Stationery supplies..... 1,911 84 |
| | | | | | | Miscellaneous..... 214 47 |
| Office salaries..... | 12,183 11 | 12,183 11 | | | | 2,706 20 |
| Rubber goods..... | 376 36 | | | | | (80 pairs boots..... } 25 coats..... } 6 pairs mitts..... } 24 hats..... } 376 36 |
| Stock..... | 7,865 79 | 130 53 | 140 52 | \$6,067 03 | \$1,527 71 | |
| Teaming..... | 9,339 88 | 9,339 88 | | | | |
| Telephones..... | 327 72 | | 8 96 | | | 327 72 |
| Yard and locker..... | 510 32 | 90 11 | | | | Gas and electricity..... \$205 64 |
| | | | | | | Miscellaneous..... 205 61 |
| | | | | | | 411 25 |
| Back Bay Piers, gatehouses..... | 412 95 | | | | | Electricity..... \$408 05 |
| | | | | | | Car fares..... 4 90 |
| | | | | | | 412 95 |
| Damages, claims and medical attendance..... | 190 00 | | | | | Miscellaneous..... \$155 00 Medical attendance..... 35 00 190 00 |

Highway Division, Sewer Service.— Maintenance Expenditure, Detail, 1916-17.

| Accounts. | Total Expendi- ture. | Labor. | Con- tracts. | Teaming. | Waste. | Coal and Wood. | Oil and Gasoline. | Packing. | Valves. | Car Fares. | Stable. | Pipe Fittings and Miscel- laneous. | Towing. | Autos. |
|---|----------------------------|--------------|-----------------|----------|----------|-------------------|----------------------|----------|------------|---------------|------------|--|----------|----------|
| Pumping station, inside, Calif Pasture..... | \$51,723 22 | \$22,128 49 | ..... | \$72 50 | \$435 00 | \$24,934 98 | \$301 25 | \$131 22 | ..... | ..... | ..... | \$3,719 84 | ..... | ..... |
| Pumping station, outside, Calif Pasture..... | 12,866 19 | 10,511 03 | ..... | 132 00 | ..... | ..... | ..... | ..... | ..... | ..... | \$782 94 | 699 90 | \$335 00 | \$405 32 |
| Pumping station, engines, Calif Pasture..... | 24,260 03 | 20,544 65 | ..... | ..... | ..... | ..... | 1,089 75 | 578 22 | \$1,753 50 | ..... | ..... | 293 91 | ..... | ..... |
| Pumping station, boilers, Calif Pasture..... | 17,133 35 | 15,716 85 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1,416 50 | ..... | ..... |
| Pumping station, Union Park street..... | 5,278 67 | 3,818 04 | ..... | 25 65 | 12 75 | 282 04 | ..... | 8 10 | ..... | ..... | ..... | 1,132 09 | ..... | ..... |
| Pumping station, Summer street..... | 1,077 32 | 317 75 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 759 57 | ..... | ..... |
| Pumping station, Hyde Park.. | 540 00 | 293 56 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 246 44 | ..... | ..... |
| Moon Island..... | 14,348 96 | 11,354 33 | \$900 00 | ..... | ..... | 319 00 | 10 49 | ..... | ..... | \$569 40 | 406 89 | 788 85 | ..... | ..... |
| Main and intercepting sewers.. | 24,108 05 | 18,788 08 | ..... | 227 46 | ..... | 251 40 | 28 75 | ..... | ..... | 70 20 | 1,155 48 | 3,175 34 | ..... | 411 34 |
| | \$151,335 79 | \$103,472 78 | \$900 00 | \$457 61 | \$447 75 | \$25,787 36 | \$1,430 24 | \$717 54 | \$1,753 50 | \$639 60 | \$2,345 31 | \$12,232 44 | \$335 00 | \$816 66 |
| <i>Credits.</i> | | | | | | | | | | | | | | |
| Main and intercepting sewers: | | | | | | | | | | | | | | |
| Amount earned by service teams..... | 202 06 | 127 50 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 74 56 | ..... | ..... | ..... |
| Totals..... | \$151,133 73 | \$103,345 28 | \$900 00 | \$457 61 | \$447 75 | \$25,787 36 | \$1,430 24 | \$717 54 | \$1,753 50 | \$639 60 | \$2,270 75 | \$12,232 44 | \$335 00 | \$816 00 |

Recapitulation.— Maintenance Detail, 1916-17.

| | Improved Sewerage. | Outside Improved Sewerage. | Totals. |
|---|-----------------------|----------------------------------|--------------|
| Labor..... | \$103,472 78 | \$122,898 83 | \$226,371 61 |
| Contracts..... | 900 00 | 25,397 01 | 26,297 01 |
| Teaming, hired and city..... | 457 61 | 13,194 80 | 13,652 41 |
| Waste..... | 447 75 | 27 53 | 475 28 |
| Fuel..... | 25,787 36 | 750 53 | 26,537 89 |
| Oil..... | 1,430 24 | 1,012 94 | 2,443 18 |
| Packing..... | 717 54 | ..... | 717 54 |
| Valves..... | 1,753 50 | ..... | 1,753 50 |
| Car fares, traveling expenses, etc..... | 639 60 | 522 57 | 1,162 17 |
| Horses, etc..... | 2,345 31 | 8,749 62 | 11,094 93 |
| Towing..... | 335 00 | ..... | 335 00 |
| Pipe fittings and miscellaneous..... | 12,232 44 | ..... | 12,232 44 |
| Telephone..... | ..... | 327 72 | 327 72 |
| Automobiles, repairs and supplies..... | 816 66 | 2,575 33 | 3,391 99 |
| Stock and miscellaneous supplies..... | ..... | 26,170 22 | 26,170 22 |
| | \$151,335 79 | \$201,627 10 | \$352,962 89 |
| CREDITS. | | | |
| <i>Improved Sewerage.</i> | | | |
| Labor..... | \$127 50 | | |
| Stables..... | 74 56 | | |
| | 202 06 | | |
| <i>Outside Improved Sewerage.</i> | | | |
| Miscellaneous..... | \$7,690 92 | | |
| Labor..... | 11,933 85 | | |
| Stock..... | 10,937 03 | | |
|  | ..... | 30,561 80 | 30,763 86 |
| | \$151,133 73 | \$171,065 30 | \$322,199 03 |

WASTE.
3,700 pounds at 9½ to 13½ \$447 75

COAL.
5,138.730 tons soft coal..... \$24,934 92
126 tons hard coal..... 852 44
\$25,787 36

TOWING.
Boston Tow Boat Company.. \$335 00

PACKING.
764½ pounds at 40c. to \$1.80, \$717 54

OIL.
2,833 gallons of engine at.... 17½c. to 23c.
662 gallons cylinder at.... 20c. to 28c.
355 gallons gargyle at.... 35c.
10% discount.
104 gallons sperm at..... 74c. to 84c.
30 gallons lard at..... \$1.
49½ gallons turbine at.... 28c.
2,938 pounds grease at..... 8½c. to 9c.
500 gallons kerosene at.... 6c. to 8c.
324 gallons gasolene at.... 12c. to 26c.

Coal at Pumping Station, Calf Pasture.

| DATE. | Contractor. | Tons. | PAID IN 1916-17. | |
|------------|--------------------------------|-----------|------------------|-------------|
| | | | Per Ton. | Totals. |
| Jan. 13... | Northern Coal Company..... | 146.437 | \$4 07 | \$596 00 |
| Mar. 1... | Northern Coal Company..... | 1,465.799 | 4 07 | 5,965 80 |
| May 25... | Metropolitan Coal Company..... | 2 | 5 25 | 10 50 |
| June 21... | Northern Coal Company..... | 1,498.088 | 5 21 | 7,805 04 |
| Aug. 25... | Northern Coal Company..... | 2,026.406 | 5 21 | 10,557 58 |
| | Totals..... | 5,138.730 | ..... | \$24,934 92 |

Catch-basins Cleaned by Contract, 1916-17.

| District. | Contractor. | Start and Finish of Work. | Price per Basin. | Total Cubic Yards Excavated. | Contractor Received. | Total Basins Cleaned. | Total Basins Freed. | Total Drop Inlets Cleaned. | Average Cubic Yards per Basin. | Total Cost of Inspection. | Average Cost to City per Basin. |
|---|----------------|----------------------------------|------------------|------------------------------|----------------------|-----------------------|---------------------|----------------------------|--------------------------------|---------------------------|---------------------------------|
| 1. South Boston. | M. H. Lynch. | {Feb. 1, 1916 Dec. 15, 1916} | \$2 00 | 2,014.69 | \$1,307 00 | 639 | 7 | 15 | 3.15 | \$812 00 | \$3 27 |
| 2. East Boston. | J. W. Collins. | {Feb. 7, 1916 Jan. 31, 1917} | 2 40 | 1,692.67 | 1,342 60 | 559 | ..... | 1 | 3.03 | 371 00 | 3 06 |
| 3. Charlestown. | J. W. Collins. | {Feb. 1, 1916 Jan. 8, 1917} | 2 50 | 1,644.02 | 1,284 50 | 513 | ..... | 2 | 3.20 | 381 50 | 3 24 |
| 4. Brighton. | M. H. Lynch. | {Mar. 6, 1916 Dec. 15, 1916} | 2 00 | 1,470.77 | 1,186 00 | 590 | ..... | 6 | 2.49 | 598 50 | 3 01 |
| 5. West Roxbury. | M. H. Lynch. | {Feb. 1, 1916 Jan. 8, 1917} | 2 25 | 1,298.18 | 1,234 50 | 546 | 1 | 4 | 2.38 | 644 00 | 3 43 |
| 6. Dorchester. | M. H. Lynch. | {Feb. 31, 1916 Jan. 31, 1917} | 2 50 | 4,901.86 | 4,120 00 | 1,622 | 14 | 37 | 3.02 | 1,316 00 | 3 31 |
| 7. South of Dover and Berkeley streets. | M. H. Lynch. | {Feb. 1, 1916 Jan. 31, 1917} | 2 75 | 5,222.63 | 4,689 00 | 1,608 | 81 | 105 | 3 25 | 1,732 50 | 3 83 |
| 8. North of Dover and Berkeley streets. | J. W. Collins. | {Feb. 1, 1916 Jan. 31, 1917} | 3 19 | 6,854.83 | 7,738 08 | 2,132 | 431 | 75 | 3.21 | 1,218 00 | 3 76 |
| 11. Hyde Park. | M. H. Lynch. | {July 31, 1916 Aug. 19, 1916} | 1 00 | 249.71 | 119 00 | 93 | 12 | 2 | 2.68 | 106 75 | 2 15 |
| Total catch-basins cleaned. | | 8,302 | Total costs: | | Contractors. | | *\$23,020 68 | | | | |
| Total catch-basins freed. | | 546 | | | Inspection. | | †8,787 25 | | | | |
| Total drop inlets cleaned. | | 247 | | | Advertising. | | 4 20 | | | | |
| | | | | | Miscellaneous. | | 66 00 | | | | |
| | | | | | | | \$31,878 13 | | | | |

Total cubic yards material removed, 25,349.36

* Paid in 1917, \$3,360.51.

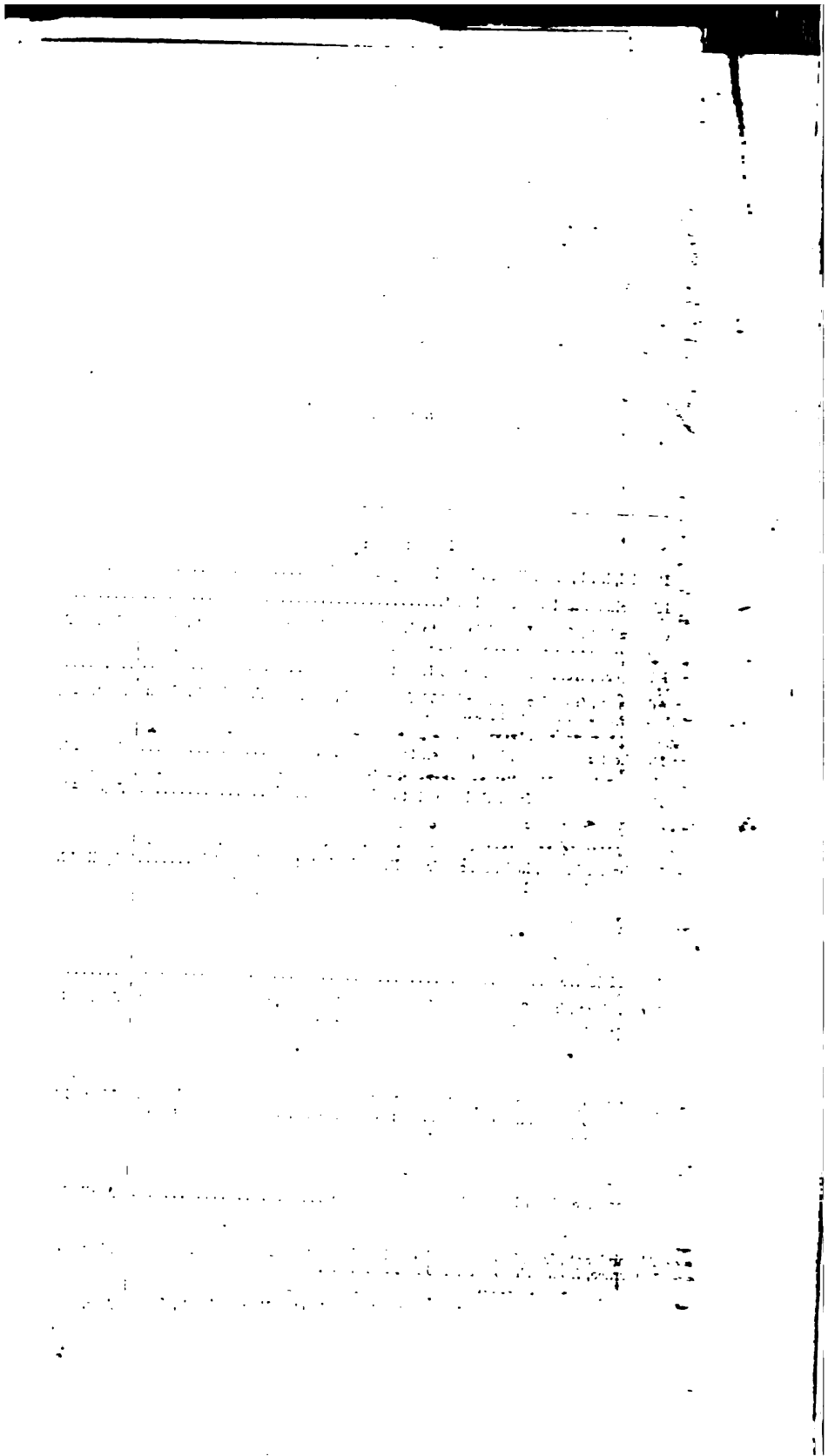
† Includes \$1,500 salary of transitman in charge; \$107 part salary of general foreman of construction; total \$1,607.

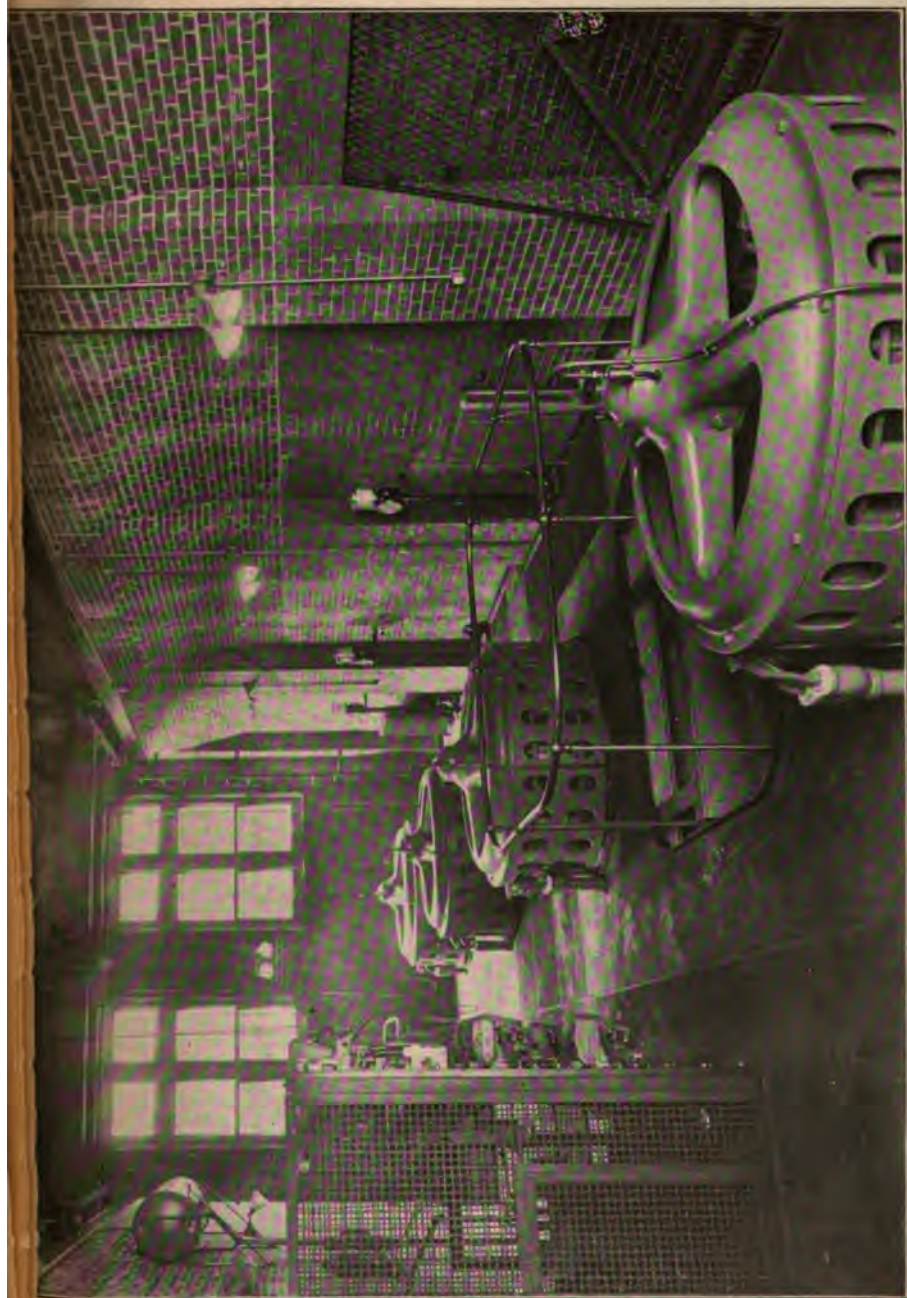
Sewerage Works.

Expenditures, February 1, 1916, to January 31, 1917.

| Accounts. | Labor. | Teaming. | Materials. | Miscellaneous. | Paid to Contractors. | Totals. |
|--|---------------------|-------------------|--------------------|--------------------|----------------------|---------------------|
| Engineers' salaries..... | \$56,518 87 | | | | | \$56,518 87 |
| Engineers' expense..... | 1,423 61 | \$965 27 | | \$11,814 65 | | 13,903 53 |
| Pumping stations..... | 79 52 | | \$1,357 99 | 304 50 | \$1,985 80 | 3,727 81 |
| Sundries..... | | | 2,273 90 | 86 40 | | 2,360 30 |
| Land-takings and court executions..... | | | | 2,528 40 | | 2,528 40 |
| New manholes, entire city..... | 1,864 83 | 439 54 | 1,063 35 | | 412 08 | 3,779 75 |
| New catch-basins, South Boston..... | 1,323 69 | 330 74 | 498 57 | | 234 68 | 2,387 68 |
| New catch-basins, East Boston..... | 494 80 | 102 00 | 341 12 | | 106 61 | 1,044 53 |
| New catch-basins, Charlestown..... | 45 78 | 13 00 | 6 09 | | | 64 87 |
| New catch-basins, Brighton..... | 93 00 | | 110 97 | | 565 65 | 769 62 |
| New catch-basins, West Roxbury..... | 3,627 59 | 446 33 | 913 18 | | 589 75 | 5,576 85 |
| New catch-basins, Dorchester..... | 1,399 96 | 116 84 | 1,632 23 | | 2,982 55 | 6,031 58 |
| New catch-basins, Hyde Park..... | 667 75 | 107 00 | 367 62 | | | 1,142 37 |
| New catch-basins, Roxbury..... | 3,244 33 | 692 15 | 950 91 | | 178 58 | 5,065 97 |
| New catch-basins, city proper..... | 3,758 17 | 570 96 | 674 64 | | 634 48 | 5,637 95 |
| Sewers built in entire city..... | 49,745 31 | 529 34 | 11,685 39 | 6,649 88 | 381,347 46 | 449,957 38 |
| Totals..... | \$124,287 21 | \$4,012 87 | \$21,775 96 | \$21,393 83 | \$389,037 59 | \$560,497 46 |







UNION PARK STREET PUMPING STATION. (Photo by F. B. Conlin.)



SEWERAGE WORKS LOAN EXPENDITURES FOR 1916 AND 1917.

SOUTH BOSTON.

| | |
|--|--------------------|
| West First street, from F street to 140 feet easterly, | \$120 97 |
| Kemp street overflow | 300 00 |
| East Seventh street, from H street to Sanger street | 1,075 48 |
| B and Seventh streets overflow extension from New York, New Haven & Hartford Railroad to a point 130 feet westerly | 16,836 41 |
| Strandway and old harbor improvement | 1,981 37 |
| | <u>\$20,314 23</u> |

Built 339.47 linear feet, 3 manholes, 1 tide-gate chamber.

EAST BOSTON.

| | |
|--|--------------------|
| Boardman street, from Leyden street to Ashley street | \$2,436 35 |
| Condor street, from Glendon street to East Eagle street | 1,383 10 |
| Wordsworth street, from Horace street to Cole-ridge street | 295 72 |
| Frankfort street, from Prescott street to Neptune road | 37,976 00 |
| Neptune road, from Bennington street to Boston, Revere Beach & Lynn Railroad | |
| Gove street, from Cottage street to Venice street | 2,601 46 |
| Jeffries street, from Marginal street to Sumner street | 1,535 15 |
| Sumner street, from Jeffries street to about 250 feet east | |
| London street, from Decatur street to Maverick street | 8 50 |
| | <u>\$46,236 28</u> |

Built 6,799.50 linear feet, 35 manholes, 25 catch-basins.

CHARLESTOWN.

| | |
|--|-------------------|
| Haverhill street, from Perkins street to Main street | <u>\$2,106 97</u> |
|--|-------------------|

Built 320.76 linear feet, 3 manholes.

BRIGHTON.

| | |
|--|--------------------|
| Dumas, Cygnet, Ascot and Lincoln streets . . . | \$269 92 |
| North Beacon street, from 180 feet west of Parsons street to 291 feet west . . . | 112 37 |
| Foster street, from 260 feet south of Washington street to 75 feet south . . . | 2,089 48 |
| Cleveland circle, from Beacon street to Chestnut Hill avenue . . . | |
| Chestnut Hill avenue, from Cleveland circle to Brookline line . . . | |
| Colonial road, from Commonwealth avenue to Euston road . . . | |
| Colon street, from Buckminster street to Warren street . . . | 1,605 59 |
| Commonwealth avenue, from Ashby street to Essex street . . . | 3,604 66 |
| Kenrick street, from Lake street to Brayton road, . . . | 14,308 23 |
| Walbridge street, from Brainerd road to Commonwealth avenue . . . | 2,922 56 |
| Commonwealth avenue, about 600 feet west of Cottage Farm Bridge . . . | 888 41 |
| | 2,354 94 |
| | <u>\$28,156 16</u> |

Built 4,254.48 linear feet, 25 manholes.

WEST ROXBURY.

| | |
|--|--------------------|
| Mendelssohn street, from Nikisch avenue to Washington street . . . | \$4,800 02 |
| Hobson street, from Beech street to 420 feet east, . . . | |
| Private land, Board of Survey street No. 1706, from Caspar street to Newfield street . . . | |
| Newfield street, from Board of Survey street No. 1706 to Brook Farm road . . . | |
| Archdale road, from Washington street to 580 feet south and east . . . | 953 87 |
| Ballard street, from Centre street to Bardwell street . . . | 2,205 68 |
| Hyde Park avenue at Northbourne road . . . | 2,443 19 |
| Glenside avenue, from Glen road to 375 feet southerly . . . | 408 02 |
| Centre street, from La Grange street to 360 feet northerly . . . | 21 00 |
| La Grange street, from Glenham street to 590 feet southeast . . . | 21 00 |
| Haydn street, from Nikisch avenue to Washington street . . . | 1,674 67 |
| Brahms street, from Nikisch avenue to Washington street . . . | 3,618 29 |
| Carried forward | <u>\$16,145 74</u> |

PUBLIC WORKS DEPARTMENT.

441

| | |
|---|--------------------|
| <i>Brought forward</i> | \$16,145 74 |
| Elven road, from Washington street to Stony brook | 20 00 |
| Farragut street, from Salisbury street to Ellswood street | * 6,039 78 |
| Ellswood street, from Farragut street to Baker street | |
| Baker street, from Ellswood street to Chiswick road | |
| Worley street, from metropolitan sewer to Dwinell street | 2,028 08 |
| Hodgdon terrace, from Maple street to 200 feet westerly | 343 24 |
| Florence street, from Westbourne road to Wyvern street | |
| Wyvern street, from Florence street to Hyde Park avenue | |
| | <hr/> |
| | <u>\$24,576 84</u> |

Built 4,640.99 linear feet, 24 manholes.

DORCHESTER.

| | |
|--|--------------------|
| Astoria street, from Mattapan brook to Norfolk Street Playground | \$3,333 09 |
| Caspian way, from Savin Hill avenue to Rockland avenue | 6,205 89 |
| Everton street, from Geneva avenue to Olney street | |
| River street, from Holmfield avenue to 345 feet westerly | |
| Freeport street, Linden street and Dorchester ave., | 1,463 00 |
| Chester street, from 225 feet southwest of Rockway street | 3,122 90 |
| Private land, from Rexford street to Chester street | |
| Columbia park, from Intervale street to 85 feet north | |
| Favre street, from Oakland street to 490 feet northeast | 1,115 83 |
| Private land, from Favre street to Haven avenue, | |
| Royal road, from Randolph road to Raleigh road, | |
| Devon street, from Lorraine street to 35 feet southeast | |
| Lorraine street, from Stanwood street to Devon street | 1,406 88 |
| Randolph road, from Rock road to Rosemont street | |
| <i>Carried forward</i> | <hr/> |
| | <u>\$16,647 59</u> |

* Built in connection with Temple street, and outlet. Separate system of drainage.

| | |
|---|--------------|
| <i>Brought forward</i> | \$16,647 59 |
| Richfield street and Westwood street | 1,946 70 |
| Oakland street, Rockdale street to Hollingsworth street | 2,549 33 |
| Oakland street, from Richmond road to 150 feet easterly | |
| Hilltop street, from Granite avenue to Hallet Davis street | 563 70 |
| Adams street, from Beaumont road to 150 feet south | 1,772 51 |
| Southwick street, from Freeport street to Savin Hill avenue | |
| Dorchester avenue, from Hancock street to Savin Hill avenue | 3,948 58 |
| Davenport brook, from Codman street to Washington street | 42,179 62 |
| Dorchester brook in Dacia street, from Brookford street to Quincy street | 62,169 45 |
| Lenoxdale avenue and Myrtlebank avenue | 279 11 |
| Westville street, from 90 feet west of Ditson street to Draper street | 2,221 18 |
| Leroy street west, from Ditson street | |
| Josephine street, from Ditson street to 90 feet west | 17,412 33 |
| Bowdoin street, from Winter street to Hendry street | |
| Hendry street, from Bowdoin street to Coleman street | 2,453 52 |
| Coleman street, from Hendry street to Quincy street | |
| Downer avenue, from Pleasant street to Sawyer avenue | 2,327 81 |
| Alexander street, from 635 feet south of Oleander street to 162 feet south | |
| Parker terrace, from Ashmont street to 170 feet south | 1,759 46 |
| Private land, from Chelmsford street to Franconia street | |
| Franconia street, from Adams street to Charlmont street | 463 82 |
| Eaton street, from Howe street to 170 feet northwest | |
| Payson avenue, from Hancock street to Glendale street | 952 52 |
| Rugby road, from Oakland street to Randolph road | 3,045 26 |
| Blake street, at Randolph road | |
| Willow court, from Massachusetts avenue to 123 feet east from Field's court | 1,828 92 |
| <i>Carried forward</i> | \$164,521 41 |

| | |
|--|---------------------|
| <i>Brought forward</i> | \$164,521 41 |
| Harvest street, from Willowwood street to Lucerne street | 644 03 |
| Train street, from 100 feet south of Boutwell street to Boutwell street | |
| Rutledge road, from 360 feet east of Wood avenue to 160 feet west of Hyde Park | |
| Groveland street, from Glenmore street to Manchester street | 1,069 21 |
| Levant street, from 150 feet east of Tehoe street to 140 feet easterly | 633 95 |
| Delano street, from Levant street to Bowdoin st., | |
| Mount Ida road, from Homes avenue to 200 feet north | 1,678 61 |
| Homes avenue, from 70 feet southwest of Mount Ida road to Mount Ida road | |
| Private land, south of Park street, opposite Marlowe street* | 1,326 16 |
| Estella street, from Morton street to 270 feet westerly | 1,709 79 |
| Lawrence avenue, from 65 feet southeast of Mascoma street to 95 feet southeast | 99 50 |
| Stoughton street, from 347 feet southeast of Columbia road to 100 feet southeast | |
| Wilcox road, from Beaumont street to Elm road | 10 00 |
| Sampson street, from Adams street to 295 feet easterly | |
| | <u>\$171,692 66</u> |

Credit.

| | |
|--|----------------------------|
| To Separate System of Drainage on account Lithgow street | 802 18 |
| | <u><u>\$170,890 48</u></u> |

Built 18,373.03 linear feet, 110 manholes, 69 catch-basins.

HYDE PARK.

| | |
|--|--------------------------|
| West street, from Neponset river to River street | \$242 45 |
| Erie street, from Neponset river to Vose avenue | 135 53 |
| Water street, from Garfield street to East Glenwood avenue | 3,437 10 |
| East Glenwood avenue, from Water street to Loring street | |
| Wilton street, from Hyde Park avenue to 250 feet southeast | 116 00 |
| Randolph road, from Rock road to Ridge road | |
| | <u><u>\$3,931 08</u></u> |

Built 1,206.27 linear feet, 7 manholes.

* Built in connection with Morton street, etc. Separate system of drainage.

CITY PROPER.

| | |
|--|---------------------|
| Albany street, from Dover street to Massachusetts avenue | \$19,426 31 |
| Albany street, across at East Dedham street | } 11,547 91 |
| East Dedham street, from Albany street to Thorn street | |
| Canal street, from Causeway street to Traverse street | 17,994 42 |
| South End Sewer Improvement, Section 3 | 840 00 |
| South End Sewer Improvement, Section 5 | 2,890 18 |
| North Bennet street, Wiggin street and Tileston street | 2,794 97 |
| Salutation street, from Commercial street to Hanover street | 551 92 |
| South End Sewer Improvement, Alleys 539, 542, 543, 545 | 2,495 30 |
| Washington street, from Stillman street to Cross street | 928 09 |
| South, Kingston, Albany, Lincoln and East streets, South End Sewer Improvement, Columbus avenue, from Alley 815 to Wellington street, and Wellington street, from Columbus avenue to Alley 531 | 537 05 |
| South End Sewer Improvement, Shawmut avenue at Union Park street | } 1,837 47 |
| Upton Street, from Shawmut avenue to Newland street, and Newland street, from Upton street to Draper's lane | |
| Cross street, from Commercial street to Fulton street | 1,769 78 |
| Beach, Kilby, Water and Broad streets | 62 07 |
| Canal street, from Market street to Merrimac street | } 18,188 17 |
| Sudbury street, from Haymarket square to Portland street | |
| Clinton street, from Commercial street to Merchants row | 4,670 87 |
| Albany street, from Harvard street to Kneeland street | 15,765 98 |
| Barrett street, from Fulton street to 100 feet westerly | } 3,592 74 |
| Fulton street, from Richmond street to Ferry street | |
| Harrison avenue, from Kneeland street to Dover street | 19,231 54 |
| Summer street, from Estes place to 235 feet south-easterly | 537 00 |
| | <u>\$134,535 71</u> |

Built 6,227.99 linear feet, 66 manholes, 56 catch-basins.

PUBLIC WORKS DEPARTMENT.

445

ROXBURY.

| | |
|---|--------------------|
| Randall street, from Harrison avenue to Albany street | \$1,583 84 |
| Binney street, from Longwood avenue north-easterly | 424 97 |
| Brookline avenue, from Audubon road to Jersey street | 11,909 10 |
| Roys street, from Lamartine street to Chestnut avenue | 564 74 |
| Jersey street, from Peterborough street to Audubon road | 4,726 98 |
| | <u>\$19,209 63</u> |

Built 2,081.73 linear feet, 10 manholes, 4 catch-basins.

SEWERAGE WORKS LOAN, 1916-17.

| | |
|--|--------------------|
| Engineers' salaries, general | \$56,518 87 |
| Amount charged to construction of sewers | 19,732 50 |
| | <u>\$76,251 37</u> |

ENGINEERS' EXPENSE.

| | |
|-----------------|--------------------|
| Labor | \$1,423 61 |
| Teaming | 665 27 |
| Borings | 2,583 69 |
| Car fares, etc. | 1,712 66 |
| Photos | 902 40 |
| Supplies, etc. | 6,615 90 |
| | <u>\$13,903 53</u> |

PUMPING STATION CONSTRUCTION.

Contracts, Pumping Station, Calf Pasture.

| | | |
|--|----------|-------------------|
| New discharge gates, labor | \$79 52 | |
| Stock | 246 15 | |
| | | \$325 67 |
| Boston Painting and Roofing Com- pany | \$936 80 | |
| R. Minton Company | 1,049 00 | |
| | | 1,985 80 |
| Advertising | | 4 50 |
| Steel closets | | 42 00 |
| New ventilator and erecting | | 507 00 |
| Valve pattern | | 41 94 |
| Casting | | 138 60 |
| Cable chains | | 222 60 |
| | | <u>\$3,268 11</u> |
| Carried forward | | |

Brought forward \$3,268 11

Union Park Street.

| | | |
|---------------------------|---------|-------------------|
| New gauge | \$90 00 | |
| Installing same | 69 70 | |
| Roofing | 300 00 | |
| | | 459 70 |
| | | <u>\$3,727 81</u> |

SUNDRIES.

| | | |
|------------------------------------|------------|-------------------|
| Advertising | \$5 50 | |
| Expert services | 70 00 | |
| Labor | 137 67 | |
| Ironwork | 1,267 08 | |
| Traps and hooks | 1,085 00 | |
| Car fares | 10 90 | |
| Pipe | 6 22 | |
| | \$2,582 37 | |
| Less labor, 1915 account | 222 07 | |
| | | <u>\$2,360 30</u> |

COURT EXECUTIONS AND AWARDS ON ACCOUNT OF LAND
TAKINGS, ETC.

| | |
|---|-------------------|
| J. A. Fitten, trustee, Brook avenue, Roxbury | \$100 00 |
| F. J. McCarthy, trustee, private land off Ben- nington street, East Boston | 239 20 |
| Robert G. Jones, private land and Dorchester avenue, Dorchester | 729 20 |
| P. H. Fitzgerald, Dorchester brook, Dorchester, | 50 00 |
| Sophia P. Lord, Chester street, Dorchester | 100 00 |
| C. H. Jennings, Talbot avenue, Dorchester | 860 00 |
| C. and H. L. Gay, Redford street, Brighton | 100 00 |
| F. J. McLaughlin, Freeport street, Dorchester | 50 00 |
| Mark S. Reinstein, Brook avenue, Roxbury | 300 00 |
| | <u>\$2,528 40</u> |

Sewerage Works.—New Manholes.

| Location. | Built by | Number. | Labor. | Teaming. | Materials. | Contracts. | Totals. | Begun. | Finished. |
|--|----------------|---------|------------|----------|------------|------------|------------|----------|-----------|
| Gardner street..... | Day labor..... | 1 | \$50 60 | \$13 55 | \$29 05 | ..... | \$94 10 | Mar. 24 | Mar. 7 |
| Bennett street..... | Day labor..... | 1 | 89 70 | 63 86 | 45 71 | ..... | 199 27 | Mar. 28 | Mar. 8 |
| 25 Sigourney street..... | Day labor..... | 1 | 138 11 | 16 25 | 27 50 | ..... | 181 66 | Apr. 28 | May 3 |
| Massachusetts avenue..... | Day labor..... | 3 | 113 14 | 33 00 | 176 99 | ..... | 323 13 | May 2 | May 11 |
| Milton street..... | Day labor..... | 3 | 166 64 | ..... | ..... | ..... | * 186 64 | May 8 | May 31 |
| Emerson street..... | Day labor..... | 1 | 54 25 | 10 00 | 25 53 | ..... | 89 78 | June 7 | June 13 |
| Webster avenue..... | Day labor..... | 1 | 49 69 | 18 00 | 25 77 | ..... | 83 46 | June 12 | June 16 |
| Hartford street, Lamphole | Day labor..... | 1 | 37 89 | 10 00 | 32 25 | ..... | 80 14 | June 15 | June 22 |
| Beacon street..... | Day labor..... | 1 | 87 56 | ..... | 81 62 | ..... | * 169 08 | Apr. 20 | June 13 |
| Hanover and Harris streets. | Day labor..... | 2 | 112 75 | 18 00 | 68 96 | ..... | 199 71 | June 28 | July 29 |
| Lark street..... | Day labor..... | 1 | 24 84 | 12 00 | 31 56 | ..... | 68 40 | July 21 | July 25 |
| Rear 17 Gainsborough street. | Day labor..... | 1 | 39 66 | 17 00 | ..... | ..... | * 56 66 | July 27 | July 28 |
| Appleton street..... | Day labor..... | 1 | 116 48 | 36 00 | ..... | ..... | * 152 48 | Aug. 6 | Aug. 6 |
| Broadway..... | Day labor..... | 3 | 263 02 | 58 00 | 63 00 | ..... | * 384 02 | July 30 | Aug. 2 |
| McKinley square..... | Day labor..... | 1 | 138 41 | ..... | 55 90 | ..... | * 194 31 | Aug. 14 | Aug. 31 |
| Mercantile street..... | Day labor..... | 1 | 58 73 | 7 00 | ..... | ..... | * 65 73 | Sept. 1 | Sept. 5 |
| Leaping street..... | Day labor..... | 2 | 89 08 | 13 00 | 55 98 | ..... | 158 06 | Sept. 13 | Sept. 18 |
| Wildwood street..... | Day labor..... | 1 | 51 55 | 21 50 | 5 94 | ..... | * 78 99 | Nov. 6 | Nov. 11 |
| Opposite 55 Bickford street. | Day labor..... | 1 | 64 53 | ..... | ..... | ..... | * 64 53 | Dec. 7 | Dec. 9 |
| Commercial street..... | Day labor..... | 1 | 40 20 | ..... | ..... | ..... | * 40 20 | Dec. 26 | Jan. 1† |
| Batterymarch street..... | Day labor..... | 1 | ..... | 55 00 | 91 93 | ..... | * 146 93 | Aug. 16 | Aug. 27 |
| South street..... | Day labor..... | 1 | 39 66 | 8 00 | 15 81 | \$282 03 | 345 50 | June 5 | June 22 |
| Rutland street..... | Contract..... | 2 | ..... | ..... | ..... | 130 00 | * 130 00 | Dec. 1 | Dec. 7 |
| Miscellaneous..... | ..... | ..... | ..... | 19 38 | ..... | ..... | 19 38 | ..... | ..... |
| Paid in 1916 — Manholes built in 1915. | ..... | ..... | 38 34 | 10 00 | 229 25 | ..... | 277 59 | ..... | ..... |
| Totals..... | ..... | 32 | \$1,864 83 | \$439 54 | \$1,063 35 | \$412 03 | \$3,779 75 | ..... | ..... |

* Cost not complete.

† 1917.

SEWERAGE WORKS LOAN.

New Catch-basins Paid for, February 1, 1916, to January 31, 1917. (Contract and Day Labor.)

| District. | Built by | BUILT IN 1916. | | | Total Expenditure. | Location. | Number Catch-basins Built. | Number Catch-basins Rebuilt. |
|---------------------------------|------------|--------------------------------------|------------|------------------|--------------------|--|----------------------------|------------------------------|
| | | BUILT IN 1915. Materials, etc. | Labor. | Con- tractor. | | | | |
| New catch-basins, South Boston. | Day labor. | \$365 84 | | | \$365 84 | | | |
| New catch-basins, South Boston. | Day labor. | | \$136 04 | | | Tuckerman street. | 2 | |
| New catch-basins, South Boston. | Day labor. | | 125 88 | | 298 74 | E street. | 2 | |
| New catch-basins, South Boston. | Day labor. | | 113 61 | | 274 05 | Summer street. | 1 | |
| New catch-basins, South Boston. | Day labor. | | 213 84 | | 217 46 | Emerson street. | 1 | |
| New catch-basins, South Boston. | Day labor. | | 174 73 | | * 275 64 | A street, No. 236. | 1 | |
| New catch-basins, South Boston. | Contract. | | 21 00 | \$234 68 | * 207 73 | Dorchester avenue. | 3 | |
| New catch-basins, South Boston. | Day labor. | | 96 77 | | * 255 68 | East First street, at Dorchester street. | 2 | |
| New catch-basins, South Boston. | Day labor. | | 132 17 | | * 174 67 | East First street, at L street. | 1 | |
| New catch-basins, South Boston. | Day labor. | | 113 70 | | * 204 17 | Connections. | | |
| | | \$365 84 | \$1,176 74 | \$234 68 | 113 70 | | 13 | |
| New catch-basins, East Boston. | Day labor. | | \$52 50 | | \$2,387 68 | 322 Border street. | 1 | |
| New catch-basins, East Boston. | Day labor. | | 388 00 | | \$135 79 | Saratoga street. | 4 | |
| New catch-basins, East Boston. | Day labor. | | 24 30 | | 777 83 | Condor street, drop inlet. | 1 | |
| | | | | | * 24 30 | | | |

| | | | | | | | | |
|-------------------------------------|----------------|----------|----------|----------|----------|------------|--|---|
| New catch-basins, East Boston..... | Contract..... | ..... | ..... | 106 61 | ..... | * 106 61 | Webster street..... | 1 |
| | | | \$494 80 | \$106 61 | \$443 12 | \$1,044 53 | | 7 |
| New catch-basins, Charlestown..... | Day labor..... | ..... | \$45 78 | ..... | \$19 09 | * \$64 87 | Alford street..... | 1 |
| | | | \$45 78 | ..... | \$19 09 | \$64 87 | | 1 |
| New catch-basins, Brighton..... | Day labor..... | \$110 97 | ..... | ..... | ..... | \$110 97 | Union and Washington streets. | 1 |
| New catch-basins, Brighton..... | Contract..... | ..... | \$10 00 | \$297 65 | ..... | * 307 65 | | |
| New catch-basins, Brighton..... | Contract..... | ..... | 14 00 | 156 00 | ..... | * 170 00 | Hano street..... | 1 |
| New catch-basins, Brighton..... | Contract..... | ..... | 7 00 | 112 00 | ..... | * 119 00 | Turner street..... | 1 |
| New catch-basins, Brighton..... | Contract..... | ..... | 62 00 | ..... | ..... | 62 00 | Connections. | |
| | | \$110 97 | \$93 00 | \$565 65 | ..... | \$769 62 | | 3 |
| New catch-basins, West Roxbury..... | Day labor..... | ..... | \$192 45 | ..... | \$57 93 | * \$250 38 | Union avenue..... | 1 |
| New catch-basins, West Roxbury..... | Day labor..... | ..... | 167 55 | ..... | 25 98 | * 193 53 | Green street, at Amory street, drop inlet. | 2 |
| New catch-basins, West Roxbury..... | Day labor..... | ..... | 121 06 | ..... | 44 37 | 165 43 | South street, opposite 567... | 1 |
| New catch-basins, West Roxbury..... | Day labor..... | ..... | 343 79 | ..... | 187 90 | 531 69 | South street at Archdale road. | 2 |
| New catch-basins, West Roxbury..... | Day labor..... | ..... | 149 57 | ..... | 85 65 | 235 22 | Boylston street..... | 1 |
| New catch-basins, West Roxbury..... | Day labor..... | ..... | 416 06 | ..... | 279 97 | 696 03 | Granada avenue..... | 3 |
| New catch-basins, West Roxbury..... | Day labor..... | ..... | 144 06 | ..... | 72 51 | 216 57 | South street, No. 562..... | 1 |
| New catch-basins, West Roxbury..... | Day labor..... | ..... | 136 32 | ..... | 41 50 | * 177 82 | Florence street..... | 1 |
| New catch-basins, West Roxbury..... | Day labor..... | ..... | 326 37 | ..... | 170 71 | 497 08 | Morton street..... | 2 |
| New catch-basins, West Roxbury..... | Day labor..... | ..... | 264 53 | ..... | 98 59 | * 363 12 | Canterbury street..... | 2 |

* Cost not complete.

Sewerage Works Loan.—Continued.

| District. | Built by | Built in 1915. | | Built in 1916. | | | | Location. | Number Catch-basins Built. | Number Catch-basins Rebuilt. |
|-------------------------------------|----------------|-----------------|------------|----------------|-----------------------|--------------------|------------|--|----------------------------|------------------------------|
| | | Materials, etc. | Labor. | Contractor. | Material and Teaming. | Total Expenditure. | | | | |
| | | | | | | | | | | |
| New catch-basins, West Roxbury..... | Day labor..... | ..... | \$102 36 | ..... | ..... | ..... | * \$102 36 | Connections. | 1 | |
| New catch-basins, West Roxbury..... | Day labor..... | ..... | 246 20 | ..... | ..... | \$118 09 | 364 29 | Bellevue avenue..... | 1 | |
| New catch-basins, West Roxbury..... | Day labor..... | ..... | 217 30 | ..... | ..... | 88 03 | 305 33 | 415 Centre street..... | 1 | |
| New catch-basins, West Roxbury..... | Day labor..... | ..... | 278 36 | ..... | ..... | 76 03 | 354 39 | 27 Cornell street..... | 1 | |
| New catch-basins, West Roxbury..... | Contract..... | ..... | 100 91 | \$333 40 | 12 25 | 446 56 | ..... | Walk Hill and Wachusett street. | 2 | |
| New catch-basins, West Roxbury..... | Contract..... | ..... | 28 00 | 256 35 | ..... | ..... | 284 35 | Canterbury street..... | 1 | |
| New catch-basins, West Roxbury..... | Day labor..... | ..... | 134 76 | ..... | ..... | ..... | * 134 76 | Centre street at Green street, track basins. | 2 | |
| New catch-basins, West Roxbury..... | Day labor..... | ..... | 257 94 | ..... | ..... | ..... | * 257 94 | Walk Hill street at Paine street. | 1 | |
| New catch-basins, Dorchester..... | Day labor..... | ..... | \$3,627 59 | ..... | \$589 75 | \$1,359 51 | \$5,576 85 | ..... | 25 | |
| New catch-basins, Dorchester..... | Day labor..... | \$173 25 | ..... | ..... | ..... | ..... | \$173 25 | ..... | 1 | |
| New catch-basins, Dorchester..... | Day labor..... | ..... | \$118 99 | ..... | ..... | \$61 59 | 180 58 | Pleasant street..... | 2 | |
| New catch-basins, Dorchester..... | Day labor..... | ..... | 114 78 | ..... | ..... | 15 84 | 130 62 | Stoughton street, track basins. | 2 | |
| New catch-basins, Dorchester..... | Day labor..... | ..... | 617 89 | ..... | ..... | 62 25 | * 680 14 | Epping street..... | 2 | |
| New catch-basins, Dorchester..... | Contract..... | ..... | 73 50 | ..... | ..... | ..... | * 73 50 | Norfolk avenue..... | 1 | |

| | Day labor | 49 60 | 16 00 | 65 60 | Connections. | |
|--|-----------|----------|------------|------------|----------------------------|----|
| New catch-basins, Dorchester | Contract | 24 50 | | 24 50 | Theodore street, etc. | 5 |
| New catch-basins, Dorchester | Contract | 97 70 | \$1,957 54 | 453 14 | Abbott street, etc. | 10 |
| New catch-basins, Dorchester | Contract | 303 00 | 2,221 96 | 867 00 | | 21 |
| New catch-basins, Dorchester | Contract | | \$4,179 50 | \$7,228 53 | | |
| Credit transfer to separate systems of drainage. | | | 1,196 95 | 1,196 95 | | |
| New catch-basins, Hyde Park | Day labor | \$197 75 | \$2,932 55 | \$1,475 82 | Milton street | 5 |
| New catch-basins, Hyde Park | Day labor | | \$622 25 | \$474 62 | Connections. | |
| New catch-basins, Hyde Park | Day labor | | 45 50 | 45 50 | | |
| New catch-basins, Roxbury | Day labor | | \$667 75 | \$474 62 | | 5 |
| New catch-basins, Roxbury | Day labor | \$469 17 | | \$469 17 | Brookline avenue | 4 |
| New catch-basins, Roxbury | Day labor | | \$1,323 77 | \$653 05 | Wait street | 1 |
| New catch-basins, Roxbury | Day labor | | 146 16 | 103 45 | Columbus avenue | 1 |
| New catch-basins, Roxbury | Day labor | | 105 56 | 101 86 | Massachusetts avenue | 1 |
| New catch-basins, Roxbury | Day labor | | 64 50 | 104 80 | Jersey street | 1 |
| New catch-basins, Roxbury | Day labor | | 97 18 | 75 90 | Roy and Wise streets | 2 |
| New catch-basins, Roxbury | Day labor | | 277 11 | 105 80 | Homestead street | 2 |
| New catch-basins, Roxbury | Day labor | | 138 87 | 16 00 | {Saver street | 1 |
| New catch-basins, Roxbury | Day labor | | 966 76 | 107 70 | {Saver street, track inlet | 2 |
| New catch-basins, Roxbury | Contract | | 8 75 | \$106 48 | Wensley street | 1 |

* Cost not complete.

Sewerage Works Loan.—*Concluded.*

| District. | Built by | BUILT IN 1916. | | BUILT IN 1916. | | | | Location. | Number Catch-basins Built. | Number Catch-basins Rebuilt. |
|------------------------------------|----------------|-----------------|------------|----------------|-----------------------|--------------------|-----------------------------|-----------|----------------------------|------------------------------|
| | | Materials, etc. | Labor. | Contractor. | Material and Teaming. | Total Expenditure. | | | | |
| | | | | | | | | | | |
| New catch-basins, Roxbury..... | Contract..... | ..... | \$21 00 | \$72 10 | ..... | * \$93 10 | Dearborn street..... | ..... | 2 | |
| New catch-basins, city proper..... | Day labor..... | \$469 17 | \$3,149 66 | \$178 58 | \$1,268 56 | \$5,065 97 | | | 16 | |
| New catch-basins, city proper..... | Day labor..... | \$598 01 | ..... | ..... | ..... | \$598 01 | Connections. | | | |
| New catch-basins, city proper..... | Day labor..... | ..... | \$307 29 | ..... | \$22 00 | 329 29 | Cross street..... | 4 | | |
| New catch-basins, city proper..... | Day labor..... | ..... | 324 23 | ..... | 141 90 | * 466 13 | Rose street..... | 2 | | |
| New catch-basins, city proper..... | Day labor..... | ..... | 155 08 | ..... | 103 80 | * 258 88 | McKinley square..... | 1 | | |
| New catch-basins, city proper..... | Day labor..... | ..... | 208 85 | ..... | 119 38 | 418 23 | Batterymarch street..... | 2 | | |
| New catch-basins, city proper..... | Day labor..... | ..... | 267 43 | ..... | 92 50 | * 359 93 | Fulton street..... | 1 | | |
| New catch-basins, city proper..... | Day labor..... | ..... | 142 73 | ..... | 30 00 | 172 73 | 52 South Market street..... | 1 | | |
| New catch-basins, city proper..... | Day labor..... | ..... | 176 49 | ..... | 8 00 | 184 49 | Commercial street..... | 1 | | |
| New catch-basins, city proper..... | Day labor..... | ..... | 176 67 | ..... | 30 00 | * 206 67 | Clinton street..... | 2 | | |
| New catch-basins, city proper..... | Day labor..... | ..... | 224 65 | ..... | 37 80 | * 262 45 | Blackstone street..... | 1 | | |
| New catch-basins, city proper..... | Day labor..... | ..... | 185 18 | ..... | 28 00 | * 213 18 | Kneeland street..... | 1 | | |
| New catch-basins, city proper..... | Day labor..... | ..... | 170 41 | ..... | 25 00 | * 195 41 | North Grove street..... | 1 | | |
| New catch-basins, city proper..... | Day labor..... | ..... | 93 08 | ..... | 14 00 | * 77 68 | Parkman street..... | 4 | | |
| New catch-basins, city proper..... | Day labor..... | ..... | 304 65 | ..... | 170 32 | * 564 97 | | | | |

| | | | | | | | |
|------------------------------------|----------------|------------|------------|------------|-------------|---------------------------------------|-----|
| New catch-basins, city proper..... | Day labor..... | 135 14 | ..... | 41 90 | * 177 04 | St. Botolph street..... | 1 |
| New catch-basins, city proper..... | Day labor..... | 178 29 | ..... | 36 00 | 214 29 | Devonshire street..... | 1 |
| New catch-basins, city proper..... | Day labor..... | 135 43 | ..... | 28 00 | * 163 43 | Commerce street..... | 1 |
| New catch-basins, city proper..... | Day labor..... | 77 66 | ..... | ..... | 77 66 | Washington and Brookline streets..... | 1 |
| New catch-basins, city proper..... | Contract..... | 21 00 | \$239 17 | ..... | * 260 17 | Union Park street..... | 2 |
| New catch-basins, city proper..... | Contract..... | 21 00 | 155 32 | ..... | * 176 32 | Newland street..... | 1 |
| New catch-basins, city proper..... | Contract..... | 10 50 | 143 24 | ..... | * 153 74 | Berwick park..... | 1 |
| New catch-basins, city proper..... | Contract..... | 10 50 | 96 75 | ..... | * 107 25 | Albany street..... | 1 |
| Grand totals..... | | \$598 01 | \$634 48 | \$928 60 | \$5,637 95 | | 28 |
| | | \$1,741 74 | \$5,292 30 | \$6,579 74 | \$27,721 42 | | 119 |

* Cost not complete.

New Catch-basins Paid for, February 1, 1916, to January 31, 1917. (Included in Other Sewer Construction.)

| District. | Built by | Built in 1916. | | | | Total Expenditures. | Location. | Number. |
|------------------------------------|---------------|----------------|------------|--------|------------------------|---------------------|------------------------|---------|
| | | Contractor. | Materials. | Labor. | Materials and Teaming. | | | |
| New catch-basins, East Boston..... | Contract..... | \$57 00 | \$68 00 | ..... | ..... | \$125 00 | Condor street..... | 1 |
| New catch-basins, East Boston..... | Contract..... | 961 00 | ..... | ..... | ..... | * 961 00 | Frankfort street..... | 15 |
| New catch-basins, East Boston..... | Contract..... | 684 75 | 319 80 | ..... | ..... | 1,004 55 | Grove street..... | 9 |
| New catch-basins, Dorchester..... | Contract..... | 796 00 | 350 00 | ..... | ..... | 1,146 00 | Caspian way..... | 10 |
| New catch-basins, Dorchester..... | Contract..... | 283 46 | 133 40 | ..... | ..... | 416 86 | Adams street..... | 4 |
| New catch-basins, Dorchester..... | Contract..... | 1,882 40 | 497 60 | ..... | ..... | 2,380 00 | Dorchester avenue..... | 18 |
| New catch-basins, Dorchester..... | Contract..... | 460 00 | ..... | ..... | ..... | * 460 00 | Dorchester brook..... | 5 |
| New catch-basins, Dorchester..... | Contract..... | 248 00 | ..... | ..... | ..... | * 248 00 | Bowdoin street..... | 4 |
| New catch-basins, Dorchester..... | Contract..... | 375 70 | 169 50 | ..... | ..... | 545 20 | Downer avenue..... | 6 |
| New catch-basins, Dorchester..... | Contract..... | 407 25 | 82 75 | ..... | ..... | 490 00 | Alexander street..... | 3 |
| New catch-basins, Dorchester..... | Contract..... | 689 25 | 210 75 | ..... | ..... | 900 00 | Rugby road..... | 7 |
| New catch-basins, Dorchester..... | Contract..... | 214 25 | 275 75 | ..... | ..... | 490 00 | Willow court..... | 9 |
| New catch-basins, Dorchester..... | Contract..... | 363 06 | 102 60 | ..... | ..... | 465 66 | Mount Ida road..... | 3 |
| New catch-basins, Roxbury..... | Contract..... | 300 00 | ..... | ..... | ..... | * 300 00 | Brookline avenue..... | 4 |
| New catch-basins, city proper..... | Contract..... | 2,092 90 | 761 40 | ..... | ..... | 2,854 30 | Albany street..... | 26 |
| New catch-basins, city proper..... | Contract..... | 125 41 | 19 75 | ..... | ..... | 145 16 | Shawmut avenue..... | 1 |
| New catch-basins, city proper..... | Contract..... | 150 00 | ..... | ..... | ..... | * 150 00 | Cross street..... | 3 |

| | | | | | | | | |
|------------------------------------|---------------|-------------|------------|-------|-------|-------------|----------------------|-----|
| New catch-basins, city proper..... | Contract..... | 800 10 | 65 00 | ..... | ..... | 955 10 | Clinton street..... | 5 |
| New catch-basins, city proper..... | Contract..... | 50 00 | ..... | ..... | ..... | * 50 00 | Albany street..... | 1 |
| New catch-basins, city proper..... | Contract..... | 300 00 | ..... | ..... | ..... | * 300 00 | Barrett street..... | 5 |
| New catch-basins, city proper..... | Contract..... | 750 00 | ..... | ..... | ..... | * 750 00 | Harrison avenue..... | 15 |
| | | \$12,080 53 | \$3,056 30 | | | \$15,136 83 | | 154 |

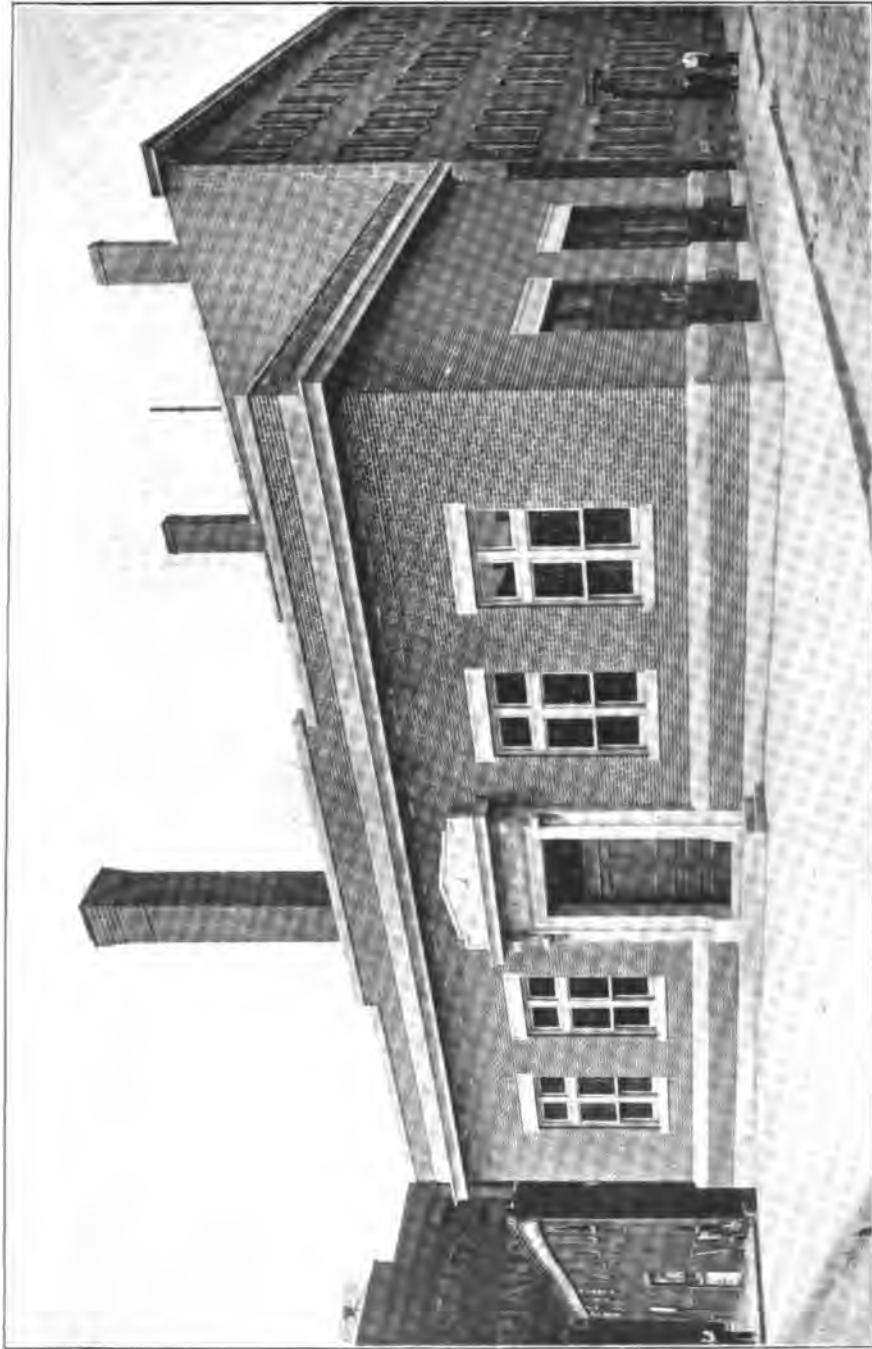
* Cost not complete.

| | | | |
|--|-----------------|--|--------------------|
| 119 catch-basins built | | | Amount Paid. |
| 4 catch-basins rebuilt | | | \$27,721 42 |
| 154 catch-basins built included in other sewer construction..... | Reconciliation. | | 15,136 83 |
| 277 | | | <u>\$42,858 25</u> |

Separate Systems of Drainage.
Expenditures February 1, 1916, to January 31, 1917.

| Accounts. | Labor. | Teaming. | Materials. | Miscellaneous. | Paid to Contractors. | Totals. |
|--|-------------|------------|-------------|----------------|----------------------|--------------|
| Engineers' salaries..... | \$30,964 43 | ..... | ..... | ..... | ..... | \$30,964 43 |
| Engineers' expense..... | 418 20 | \$219 12 | ..... | \$1,545 55 | ..... | 2,182 87 |
| Sundries..... | 50 16 | ..... | \$1,611 44 | ..... | ..... | 1,661 60 |
| Land-takings and court executions..... | ..... | ..... | ..... | 250 00 | ..... | 250 00 |
| New catch-basins, Brighton..... | ..... | 132 39 | 146 67 | ..... | ..... | 279 06 |
| New catch-basins, West Roxbury..... | ..... | 80 43 | 116 97 | ..... | \$401 92 | 599 32 |
| New catch-basins, Dorchester..... | 117 27 | ..... | 549 51 | ..... | 1,985 56 | * 2,652 34 |
| Sewers built in entire city..... | 42,264 28 | 1,374 62 | 16,705 28 | 1,041 50 | 390,601 42 | 451,987 10 |
| Totals..... | \$73,814 34 | \$1,806 56 | \$19,129 87 | \$2,887 05 | \$392,988 90 | \$490,576 72 |

* \$1 455 38 transferred from Sewerage Works on account of basins built in 1916.



ENGINE ROOM, UNION PARK STREET PUMPING STATION. (Photo by F. B. Conlin.)



SEPARATE SYSTEMS OF DRAINAGE EXPENDITURES
FOR 1916 AND 1917.

BRIGHTON.

| | |
|--|--------------------|
| Hunnewell avenue, from Champney street to Richards street | \$4 50 |
| Matchett street, from Washington street to 450 feet northeast of Hunnewell avenue | 357 80 |
| Lanark road, from Kilsyth road to Colliston road, | 43 51 |
| Atkins street, from Washington street to 610 feet northeast | 3,915 94 |
| Faneuil valley brook, in private land, from Parsons street about 178 feet east to about 100 feet north of Faneuil street | 9,081 77 |
| Gaffney street, from Commonwealth avenue to Boston & Albany Railroad | 8,923 27 |
| Gaffney street outlet, from Commonwealth avenue outlet, near Cottage Farm, to Gaffney street | |
| Beacon street, from Reservoir avenue to Newton line | |
| Telford street, from Soldiers Field road to Western avenue | 6,952 53 |
| Charles River Reservation, from Charles river to Telford street | |
| Cummings road, from Corey road to Commonwealth avenue | 3,061 92 |
| Commonwealth avenue, from St. Luke's road to Fordham road | 5,789 78 |
| Fordham road, from Commonwealth avenue to Brighton avenue | |
| Cufflin street, from Nonantum street to Tremont street | 1,917 98 |
| Glencoe street, from North Beacon street to Garden street | 2,706 09 |
| Academy Hill road, from Chestnut Hill avenue to William Jackson avenue | 24 80 |
| William Jackson avenue, from Chestnut Hill avenue to Academy Hill road | |
| | <u>\$42,779 89</u> |

Built 8,722.52 linear feet, 58 manholes, 37 catch-basins.

WEST ROXBURY.

| | |
|--|--------------|
| Pleasant, Dent, Ivory and Perham streets . . . | \$7,876 97 |
| Selwyn street, from Farquhar street to 1,174 feet northeast . . . | 548 58 |
| Woodman, Custer, Ballard, Bardwell, Hathaway, Centre and Aldworth streets and Dunster road . . . | 17,209 15 |
| St. Rose street extension, from South street to St. Rose street . . . | 254 52 |
| Spring street brook, in private land, 165 feet east of Alaric street to Centre street . . . | 5,682 33 |
| Gilmore terrace, from Park street to end of terrace, Patten street, from Hyde Park avenue to Wachusett street . . . | 753 72 |
| Stony brook, section 8 . . . | 678 34 |
| Stony brook, section 9, private land, junction of Washington and Walk Hill streets to a point 122 feet south of Washington street, at Franklin place . . . | 7,500 00 |
| Temple, Hillcrest, Lorette and Elgin streets, Temple street outlet . . . | 146,698 84 |
| Chiswick street, Tarleton road, Board of Survey street No. 1566 and No. 1549, private land, Durant, Farragut, Ellswood and Baker streets, Saville street, from Stratford street to Park street, Park street, from Robin street to Oriole street, Lorette street, from Spring street to end of street, 460 feet northwesterly . . . | 33,015 58 |
| Perham, Winslow, Vermont and Alder streets, private land . . . | 9,872 47 |
| Land of the City of Boston . . . | 2,069 96 |
| Canterbury street, from Hyde Park avenue to New York, New Haven & Hartford Railroad, Montvale street, from Belgrade avenue to 215 feet northwest . . . | 18,001 47 |
| Private land, from Belgrade avenue to Montvale street . . . | 1,638 82 |
| Orange street, from West street to Beech street, Cornell street, from Orange street to Westbourne street . . . | 6,766 94 |
| La Grange street, from Linnet street to Shaw street . . . | 4,137 11 |
| Oriole street, from Emmons road to Bellevue street, Patten street, from Wachusett street to Bourne street . . . | 1,428 66 |
| Nathan road, from Patten street to 120 feet south . . . | 4,215 22 |
| Auburn street, from Roslindale avenue to Bellevue avenue . . . | 1,313 61 |
| Carried forward . . . | \$269,662 29 |

PUBLIC WORKS DEPARTMENT.

459

| | |
|--|---------------------|
| <i>Brought forward .</i> | \$269,662 29 |
| Wachusett street, from Northbourne road to Eldridge road | 1,428 47 |
| Richwood, Willow and Centre streets and private land | 8,575 31 |
| Moraine street, from Centre street to Pond View avenue | 5,536 94 |
| Halifax street, from South Huntington avenue to Ashcroft street | |
| Elmwood street brook, in private land, and New Haven avenue from New York, New Haven & Hartford Railroad to North avenue | 1,295 84 |
| Kenton road, from Washington street to 835 feet southeasterly | 106 80 |
| Lorne street, from Harvard avenue to 650 feet northwesterly | 19 50 |
| | <u>\$286,625 15</u> |

Built 32,071.17 linear feet, 179 manholes, 86 catch-basins.

DORCHESTER.

| | |
|---|--------------------|
| Allerton road and Kenberma road | \$1,241 31 |
| Franklin Field, from Lyford street to Stratton street | 106 98 |
| Lithgow street, from Wainwright street to Talbot avenue | 535 36 |
| Ripley road, Harwick and Vassar streets | 2,889 95 |
| Morton street, from Norfolk street to New York, New Haven & Hartford Railroad | * 4,009 30 |
| Norfolk street, from Morton street to 77 feet north | |
| Centre street, from Dorchester avenue to Adams street | |
| Harvard street, from Johnston road to Morton street | |
| Private land, from Park street to Paisley park, New England avenue and Bernard street, from 215 feet south of Talbot avenue to Norfolk street | 13,622 30 |
| Harvest street, from Willowwood street to Lucerne street | 6,447 14 |
| | <u>\$28,852 34</u> |
| Transferred from sewerage works on account Lithgow street | 802 18 |
| | <u>\$29,654 52</u> |

Built 2,425.51 linear feet, 13 manholes, 9 catch-basins.

* See Sewerage Works, private land south of Park street.

HYDE PARK.

| | |
|--|-------------------|
| Gordon avenue, from Beaver street to 600 feet northwesterly | <u>\$2,623 54</u> |
|--|-------------------|

Built 506 linear feet, 2 manholes.

ROXBURY.

| | |
|--|--------------------|
| Amory street, from Centre street to Bragdon street | \$18,930 35 |
| Harold street, from Holworthy street to Towns- end street | 5,352 79 |
| Holworthy street, from Harold street to 566 feet southeasterly | |
| St. Albans road, from Francis street to Hunting- ton avenue | 897 64 |
| Tremont entrance, from Louis Prang street to 565 feet southwesterly | 17,309 33 |
| Holworthy street, from Walnut avenue to Harold street | 11,682 30 |
| Walnut avenue, from Cobden street to Townsend street | 461 80 |
| Westminster road, from Walnut park to West- minster avenue | 2,565 95 |
| Gainsborough street, from St. Botolph street to New York, New Haven & Hartford Railroad | 3,261 48 |
| Deerfield street, at Back street | 2,949 00 |
| Burlington avenue, from Brookline avenue to Boston & Albany Railroad | 6,474 18 |
| Alley 914, from Jersey street to Queensberry street | 7,438 13 |
| | <u>\$77,322 95</u> |

Built 8,431.76 linear feet, 40 manholes, 20 catch-
basins.

CITY PROPER.

| | |
|--|--------------------|
| Boylston place, from Boylston street to end | \$1,041 50 |
| Fruit street, from Charles street to Blossom, street | 11,939 55 |
| Blossom street, from Fruit street to Allen street, North Grove street, from Parkman street to Cambridge street | |
| | <u>\$12,981 05</u> |

Built 967.20 linear feet, 5 manholes, 4 catch-
basins.

Separate Systems of Drainage.

| | |
|--|--------------------|
| Engineers' salaries, general | \$30,964 43 |
| Amount charged to construction of sewers | 14,856 00 |
| | <u>\$45,820 43</u> |

PUBLIC WORKS DEPARTMENT.

461

ENGINEERS' EXPENSE.

| | |
|---------------------|-------------------|
| Labor | \$418 20 |
| Teaming | 219 12 |
| Borings | 756 16 |
| Car fares | 581 39 |
| Photos | 163 20 |
| Supplies | 44 80 |
| | <u>\$2,182 87</u> |

Court Executions and Awards on Account of Land-takings, Etc.

| | |
|--|-----------------|
| H. L. Page and administrator J. H. Page, Street Commissioner's award, James street | \$125 00 |
| Annie J. Brennan and Catherine E. Trainor, Street Commissioner's award, Baker street | 125 00 |
| | <u>\$250 00</u> |

SUNDRIES.

| | |
|--------------------------------|-------------------|
| Labor and Inspection | \$50 16 |
| Blacksmithing | 3 60 |
| Ironwork | 1,475 76 |
| Bricks | 81 00 |
| Sand | 2 94 |
| Cement | 48 14 |
| | <u>\$1,661 60</u> |

SEPARATE SYSTEMS OF DRAINAGE LOAN.
New Catch-basins Paid for, February 1, 1916, to January 31, 1917. (Contract and Day Labor.)

| District. | Built by | Built in 1915. | Built in 1916. | | | Total Expenditure. | Location. | Number Catch-basins Built. |
|-------------------------------------|---------------|-----------------|----------------|-------------|-----------------------|--------------------|--|----------------------------|
| | | Materials, etc. | Labor. | Contractor. | Material and Teaming. | | | |
| New catch-basins, Brighton..... | Day labor.... | \$279 06 | ..... | ..... | ..... | \$279 06 | | |
| | | \$279 06 | ..... | ..... | ..... | \$279 06 | | |
| New catch-basins, West Roxbury..... | Day labor.... | \$197 40 | ..... | ..... | ..... | \$197 40 | | |
| New catch-basins, West Roxbury..... | Contract.... |  | ..... | \$401 92 | ..... | 401 92 | Washington street and Asti- cou road..... | 2 |
| | | \$197 40 | ..... |  |  | \$599 32 | | 2 |
| Grand totals..... | | \$476 46 | ..... |  | \$401 92 | \$878 38 | | 2 |

New Catch-basins Paid for, February 1, 1916, to January 31, 1917. (Included in Other Sewer Construction.)

| DRAINAGE. | Built by | BUILT IN 1916. | | | | Total Expenditures. | Location. | Number. |
|-------------------------------------|----------------|----------------|------------|----------|------------------------|---------------------|-----------------------------|---------|
| | | Contractor. | Materials. | Labor. | Materials and teaming. | | | |
| New catch-basins, Brighton..... | Day labor..... | ..... | ..... | \$720 00 | \$511 59 | \$1,231 59 | Atkins street..... | 7 |
| New catch-basins, Brighton..... | Contract..... | \$192 98 | \$50 00 | ..... | ..... | 242 98 | Faneuil Valley brook..... | 2 |
| New catch-basins, Brighton..... | Contract..... | 276 00 | 150 00 | ..... | ..... | 426 00 | Gaffney street..... | 4 |
| New catch-basins, Brighton..... | Contract..... | 276 26 | 150 00 | ..... | ..... | 426 26 | Beacon street..... | 4 |
| New catch-basins, Brighton..... | Contract..... | 569 00 | 222 65 | ..... | ..... | 791 65 | Cummings road..... | 6 |
| New catch-basins, Brighton..... | Contract..... | 334 63 | 175 00 | ..... | ..... | 509 63 | Commonwealth avenue..... | 5 |
| New catch-basins, Brighton..... | Contract..... | 80 79 | 30 00 | ..... | ..... | 110 79 | Cuffin street..... | 1 |
| New catch-basins, Brighton..... | Contract..... | 626 66 | 300 00 | ..... | ..... | 926 66 | Glencoe street..... | 8 |
| New catch-basins, West Roxbury..... | Contract..... | 609 15 | 300 00 | ..... | ..... | 909 15 | Pleasant street..... | 8 |
| New catch-basins, West Roxbury..... | Contract..... | 718 77 | 350 00 | ..... | ..... | 1,068 77 | Woodman street..... | 9 |
| New catch-basins, West Roxbury..... | Contract..... | 123 88 | 72 00 | ..... | ..... | 195 88 | Stony brook, Section 9..... | 2 |
| New catch-basins, West Roxbury..... | Contract..... | 1,320 54 | 400 00 | ..... | ..... | 1,720 54 | Temple street..... | 8 |
| New catch-basins, West Roxbury..... | Contract..... | 465 08 | 300 00 | ..... | ..... | 765 08 | Saville street..... | 7 |
| New catch-basins, West Roxbury..... | Contract..... | 1,238 04 | 600 00 | ..... | ..... | 1,838 04 | Perham street..... | 16 |
| New catch-basins, West Roxbury..... | Contract..... | 533 98 | 300 00 | ..... | ..... | 833 98 | Orange street..... | 8 |
| New catch-basins, West Roxbury..... | Contract..... | 81 28 | 40 00 | ..... | ..... | 121 28 | Ortolo street..... | 1 |

New Catch-basins Paid for, February 1, 1916, to January 31, 1917.—Concluded.

| District. | Built by | BUILT IN 1916. | | | | Total Expenditures. | Location. | Number. |
|-------------------------------------|----------------|--------------------|-------------------|-----------------|------------------------|---------------------|---|------------|
| | | Contractor. | Materials. | Labor. | Materials and Teaming. | | | |
| New catch-basins, West Roxbury..... | Contract..... | \$908 25 | \$400 00 | ..... | ..... | \$1,308 25 | Patten street..... | 10 |
| New catch-basins, West Roxbury..... | Contract..... | 350 00 | ..... | ..... | ..... | * 350 00 | Richwood street..... | 7 |
| New catch-basins, West Roxbury..... | Contract..... | 991 01 | 350 00 | ..... | ..... | 1,341 01 | Moraine street..... | 10 |
| New catch-basins, Dorchester..... | Contract..... | 733 65 | 200 00 | ..... | ..... | 933 65 | Morton street..... | 8 |
| New catch-basins, Dorchester..... | Contract..... | 75 00 | 9 20 | ..... | ..... | 84 20 | New England avenue..... | 1 |
| New catch-basins, Dorchester..... | Contract..... | 2,109 34 | ..... | ..... | ..... | 2,109 34 | Dorchester and Roxbury, transfer from Sewerage Works. | |
| New catch-basins, Dorchester..... | Contract..... | 543 00 | ..... | ..... | ..... | 543 00 | Dorchester and Hyde Park, transfer from Sewerage Works. | |
| New catch-basins, Roxbury..... | Day labor..... | ..... | ..... | \$75 00 | \$50 00 | 125 00 | Holworthy street..... | 1 |
| New catch-basins, Roxbury..... | Contract..... | 284 71 | 90 00 | ..... | ..... | 374 71 | St. Albans road..... | 3 |
| New catch-basins, Roxbury..... | Contract..... | 900 00 | 200 00 | ..... | ..... | * 1,100 00 | Amory street..... | 10 |
| New catch-basins, Roxbury..... | Contract..... | 269 50 | 100 00 | ..... | ..... | 369 50 | Harold street..... | 3 |
| New catch-basins, Roxbury..... | Contract..... | 428 22 | 110 00 | ..... | ..... | 538 22 | Westminster road..... | 3 |
| New catch-basins, city proper..... | Contract..... | 335 00 | ..... | ..... | ..... | 335 00 | Fruit street..... | 4 |
| Totals..... | ..... | \$15,372 72 | \$4,898 85 | \$795 00 | \$561 59 | \$21,628 16 | ..... | 156 |

* Cost not complete.

2 catch-basins built.....
 156 catch-basins built included in other sewer construction.....
 Amount Paid.....
 \$878 38
 21,628 16
 \$22,506 54

ENTRANCE FEES, PERMITS AND ASSESSMENTS.

Entrance fees to the amount of \$3,479.44 have been deposited with the City Collector for collection from estates upon which no sewer assessment was ever paid, in accordance with the Ordinances of 1910, chapter 9, section 10.

Bills for sewer assessments amounting to \$380.28 have been deposited for collection, representing those estates assessed under chapter 456 of the Acts of 1889, and other acts, which have been connected during the year with the sewers for which they were assessed.

Bills for old sewer assessments amounting to \$883.50 have been deposited for collection, the collection of which had been postponed by vote of the Board of Aldermen until such time as the estates used the sewers for which they were assessed.

Three thousand and twenty-seven permits have been issued, viz., 366 to district foremen, 373 to contractors and 2,288 to licensed drain layers for repairing or laying house drains. The work done under these permits has been inspected and a record of the same made on the plans of the Sewer Service, in accordance with the Ordinances of 1910, chapter 9.

Plans for the assessment of estates for sewer construction have been furnished the Street Commissioners, representing 49,809 feet of sewers and appurtenances, costing \$600,104.

**Cost of Maintaining All Horses in the Sewer Service from
February 1, 1916, to January 31, 1917.**

| ITEMS. | Total Cost. | 29 Horses, Average Cost per Day. |
|---|--------------------|--|
| Labor..... | \$7,362 34 | \$0 695 |
| Hay and grain..... | 6,685 90 | 63 |
| Shoeing..... | 1,612 54 | 152 |
| Veterinary services, medicine and clipping..... | 331 00 | 031 |
| Stable goods..... | 61 58 | 006 |
| | \$16,053 36 | \$1 514 |

Summary of Sewer Construction for the Year Ending January 31, 1917.

| DISTRICTS. | Built by the City by Contract or Day Labor. | Built by Private Parties. | TOTAL LENGTH BUILT. | |
|--------------------|--|---------------------------------|---------------------|---------------|
| | <i>Linear Feet.</i> | <i>Linear Feet.</i> | <i>Linear Feet.</i> | <i>Miles.</i> |
| City proper..... | 6,778 69 | ..... | 6,778 69 | 1.284 |
| Roxbury..... | 9,778 99 | ..... | 9,778 69 | 1.852 |
| South Boston..... | 356 47 | 6,426 00 | 6,782 47 | 1.285 |
| East Boston..... | 5,816 91 | ..... | 5,816 91 | 1.102 |
| Charlestown..... | 320 76 | ..... | 320 76 | 0.061 |
| Brighton..... | 12,258 50 | 598 30 | 12,856 80 | 2.435 |
| West Roxbury..... | 35,171 16 | 871 74 | 36,042 90 | 6.826 |
| Dorchester..... | 19,067 77 | 3,217 50 | 22,285 27 | 4.220 |
| Hyde Park..... | 1,872 31 | ..... | 1,872 31 | 0.354 |
| Totals..... | 91,421 56 | 11,118 54 | 102,535 10 | 19.419 |

Schedule of Sewers Built to February 1, 1917, in the City of Boston.

| DISTRICTS. | Length of Sewers Built During the Year Ending January 31, 1917. | Length of Sewers Re- built or Abandoned During the Year Ending January 31, 1917. | Additional Lengths of Sewers for the Year Ending January 31, 1917. | |
|---|--|---|---|---------------|
| | <i>Linear Feet.</i> | <i>Linear Feet.</i> | <i>Linear Feet.</i> | <i>Miles.</i> |
| City proper..... | 6,778 69 | 3,191 36 | 3,587 33 | 0.679 |
| Roxbury..... | 9,778 99 | 101 64 | 9,677 35 | 1.833 |
| South Boston..... | 6,782 47 | 3,976 60 | 2,805 87 | 0.531 |
| East Boston..... | 5,816 91 | 180 90 | 5,636 01 | 1.067 |
| Charlestown..... | 320 76 | 320 76 | ..... | ..... |
| Brighton..... | 12,856 80 | 1,102 10 | 11,754 70 | 2.226 |
| West Roxbury..... | 36,042 90 | 1,117 96 | 34,924 94 | 6.615 |
| Dorchester..... | 22,285 27 | 1,393 63 | 20,891 64 | 3.956 |
| Hyde Park..... | 1,872 31 | ..... | 1,872 31 | 0.354 |
| Totals..... | 102,535 10 | 11,384 95 | 91,150 15 | 17.26 |
| Total length built previous to January 31, 1916..... | | | | 892.72 |
| Length of common sewers..... | | | | 909.98 |
| Length of metropolitan intercepting sewers..... | | | | 6.81 |
| Length of intercepting sewers (city)..... | | | | 24.12 |
| Grand total..... | | | | 940.91 |
| Total mileage of streets containing sewerage works..... | | | | 569.81 |

**Summary of Sewer Construction for Five Years Previous to
February 1, 1917.**

| | 1912. | 1913. | 1914. | 1915. | 1916. |
|--|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | <i>Linear Feet.</i> | <i>Linear Feet.</i> | <i>Linear Feet.</i> | <i>Linear Feet.</i> | <i>Linear Feet.</i> |
| Built by the city by contract or day labor..... | 97,884.05 | 119,697.60 | 125,768.31 | 123,717.66 | 91,421.56 |
| Built by private parties..... | 28,828.91 | 19,470.82 | 14,810.40 | 19,009.86 | 11,113.54 |
| Totals..... | 126,712.96 | 139,168.42 | 140,578.71 | 142,727.52 | 102,535.10 |

COST OF PUMPING.

Average cost per million foot-gallons for pumping:
Volume (33,976.38 million gallons) by (= times) lift
(39.6 feet) = 1,345,464.5 million foot-gallons for the
year.

Labor cost included in the totals is based upon the
following force of 48 men:

One chief engineer, one clerk, one storekeeper, one
electrician, one carpenter, one blacksmith, two ma-
chinists, four laborers, and four "engineer's watches,"
each including nine men.

Cost of city water not included.

| ITEMS. | Cost. | Cost per Million Foot- Gallons. |
|--|--------------------|---------------------------------------|
| Labor..... | \$53,490 04 | \$0 03976 |
| Coal..... | 30,094 85 | 0 02237 |
| Oil and waste..... | 1,741 35 | 0 00129 |
| Rubber valves and packing..... | 2,336 07 | 0 00174 |
| Miscellaneous supplies and renewals..... | 6,155 91 | 0 00457 |
| Totals..... | \$93,818 22 | \$0 06973 |
| Labor at screens..... | \$4,078 29 | \$0 00303 |

Table of Approximate Quantities, Lifts and Duties at Calf Pasture Pumping Station, 1916-17.

| Month. | Total Pumpage Gallons. | Average per Day. Gallons. | Minimum Day. Gallons. | Maximum Day. Gallons. | Average Lift. Feet. | Average Duty, Foot-Pounds per 100 Pounds of Coal. |
|----------------|------------------------|---------------------------|-----------------------|-----------------------|---------------------|---|
| 1916. | | | | | | |
| February..... | 3,358,507,000 | 115,810,600 | 85,393,800 | 188,257,700 | 39.6 | 80,400,000 |
| March..... | 3,409,703,100 | 109,990,400 | 88,406,200 | 128,928,000 | 39.6 | 81,900,000 |
| April..... | 3,366,561,000 | 112,218,700 | 93,422,200 | 171,771,000 | 39.7 | 91,400,000 |
| May..... | 2,895,135,600 | 93,391,500 | 74,792,200 | 177,497,500 | 39.6 | 94,100,000 |
| June..... | 2,874,472,900 | 95,815,800 | 78,845,100 | 155,212,400 | 39.7 | 89,800,000 |
| July..... | 3,012,517,100 | 97,178,000 | 74,901,100 | 140,064,900 | 39.6 | 96,000,000 |
| August..... | 2,920,538,000 | 94,210,900 | 70,002,700 | 120,859,700 | 39.6 | 91,600,000 |
| September..... | 2,497,213,700 | 83,240,500 | 69,251,100 | 118,066,700 | 39.8 | 87,300,000 |
| October..... | 2,217,138,200 | 71,520,600 | 62,203,900 | 95,683,800 | 39.7 | 83,200,000 |
| November..... | 2,035,680,300 | 67,856,000 | 62,191,100 | 104,422,900 | 39.7 | 79,100,000 |
| December..... | 2,532,672,500 | 81,699,100 | 65,224,200 | 135,989,900 | 39.5 | 81,400,000 |
| 1917. | | | | | | |
| January..... | 2,856,237,800 | 92,136,700 | 70,221,600 | 124,460,800 | 39.4 | 80,600,000 |
| Total..... | 33,976,377,200 | | | | | |
| Averages..... | | * 92,831,600 | 76,571,300 | 138,436,600 | 39.6 | * 84,500,000 |

* Average from yearly quantities.
Records from plunger displacement.

**Amount of Sludge Received and Removed from Deposit Sewers
from February 1, 1916, to January 31, 1917, Inclusive.**

| MONTH. | Cubic Yards Received. | Cubic Yards Removed. | |
|--------------------|-----------------------------|----------------------------|--|
| 1916. | | | |
| February..... | 120 | | Sludge in sewers February 1, 1916, 2,760 cubic yards. |
| March..... | 134 | | |
| April..... | 258 | 85 | |
| May..... | 427 | 255 | |
| June..... | 172 | 170 | |
| July..... | 107 | 85 | |
| August..... | 97 | 85 | |
| September..... | 556 | 630 | |
| October..... | 532 | 496 | |
| November..... | 270 | 470 | |
| December..... | 140 | | |
| 1917. | | | |
| January..... | 158 | | Sludge in sewers February 1, 1917, 3,455 cubic yards. |
| Totals..... | 2,971 | 2,276 | |

**Amount of Refuse Removed from Gatehouse from February 1,
1916, to January 31, 1917, Inclusive.**

| MONTHS. | Pounds. |
|---------------------|-----------------------------|
| 1916. | |
| February | 72,267 |
| March | 71,825 |
| April | 80,444 |
| May | 77,792 |
| June | 76,024 |
| July | 70,278 |
| August | 73,814 |
| September | 75,803 |
| October | 69,394 |
| November | 66,963 |
| December | 70,499 |
| 1917. | |
| January | 68,289 |
| | <hr/> 873,392=436,111 tons. |

Coal used in crematory=59,140 tons for 10 months and 23 days.

NOTE.— Refuse was burned under boilers from February 1, 1916, to March 8, 1916, inclusive.

Refuse was burned in crematory from March 8, 1916, to February 1, 1917.

**Number of Gates, Sumps, Regulators and Overflows to be Cared
for in Each District.**

| | Gates. | Sumps. | Regulators. | Overflows. |
|-------------------|--------|--------|-------------|------------|
| Brighton..... | 42 | 17 | 15 | 23 |
| Charlestown..... | 24 | 9 | 9 | 12 |
| East Boston..... | 47 | 19 | 18 | 26 |
| City proper..... | 102 | 41 | 15 | 42 |
| Dorchester..... | 64 | 11 | 2 | 18 |
| South Boston..... | 50 | 25 | 4 | 21 |
| Roxbury..... | 44 | 10 | ..... | 20 |

Flushing and penstock gates, 19.

WORK ACCOMPLISHED FOR YEAR ENDING JANUARY 31, 1917.

| | |
|--|-------|
| Tide gates inspected and cleaned | 2,870 |
| Sumps inspected and cleaned | 1,950 |
| Regulators inspected and cleaned | 1,170 |
| Overflows inspected and cleaned | 1,560 |
| Tide gates repaired | 150 |
| Sumps repaired | 30 |
| Regulators repaired | 45 |
| Overflows repaired | 20 |
| Manholes repaired | 130 |
| Manhole steps put in and reset | 70 |
| Tide gates replaced with new ones | 4 |
| New tide gates put in | 7 |
| Penstock and flushing gates cleaned, oiled and re- paired | 49 |
| Old iron castings replaced on street with new ones | 65 |
| Old regulator floats replaced with new ones | 5 |

**PUBLIC WORKS DEPARTMENT, HIGHWAY
DIVISION (WATER SERVICE).**

FINANCIAL STATEMENT.

RECEIPTS.

| | |
|--|------------------------------|
| Sales of water | \$3,037,974 66 |
| Service pipes and repairs | 30,611 24 |
| Elevator, fire, motor and standpipes and repairs | 27,490 71 |
| Fees for summonses | 3,746 25 |
| Labor materials, etc., for miscellaneous work | 3,275 08 |
| Sales of old materials | 2,533 77 |
| Interest on bank deposits | 1,059 38 |
| Extension of main pipe | 905 97 |
| Sales of merchandise | 855 53 |
| Shutting off and letting on water | 672 00 |
| Board of horse | 121 00 |
| Testing meters | 68 12 |
| Sale of old automobile | 35 00 |
| Miscellaneous | 1 00 |
| Total receipts from all sources | \$3,109,349 21 |
| Transferred to city loan account to pay Hyde Park water debt | \$16,000 00 |
| Transferred to city loan account to pay general city debt | 391,823 86 |
| Transferred to credit of Collecting Department, Water Service | 25,774 00 |
| | <u>433,597 86</u> |
| | <u>\$2,675,751 35</u> |

EXPENDITURES.

| | |
|--|------------------------------|
| Current expense and extensions | \$917,823 64 |
| Interest on loans | 87,866 59 |
| Refunded water rates | 628 33 |
| Metropolitan water assessment | 1,669,432 79 |
| | <u>\$2,657,751 35</u> |

SERVICE MAINS AND RELAYING MAINS.

| | |
|---|---------------------------|
| Balance appropriation February 1, 1916 | \$135,014 40 |
| Expenditures during fiscal year 1916-17 | 47,868 21 |
| | <u>182,882 61</u> |
| Balance appropriation January 31, 1917 | <u>\$87,146 19</u> |

Details of expenditures under the appropriation for current expenses for the fiscal year ending January 31, 1917:

A. PERSONAL SERVICE.

| | | |
|--|------------|--------------|
| Division engineer | \$986 78 | |
| Chief engineer | 1,200 00 | |
| Engineer in charge | 3,468 00 | |
| District engineers and assistants | 17,739 45 | |
| Superintendent and deputy | 4,985 76 | |
| Clerks, messengers, etc. | 53,810 76 | |
| Meter readers | 20,553 14 | |
| Telephone operator | 780 00 | |
| Physician | 166 66 | |
| Veterinary | 250 00 | |
| General foremen | 4,771 95 | |
| Foremen | 17,622 24 | |
| Inspectors | 47,558 65 | |
| Inspectors of castings | 2,380 00 | |
| Pipe examiners | 2,180 50 | |
| Sealers of fire pipes | 2,028 00 | |
| Blacksmiths | 919 53 | |
| Carpenters | 7,825 50 | |
| Chauffeurs | 8,075 00 | |
| Electrician | 1,171 20 | |
| Emergency men | 13,254 27 | |
| Steam engineer | 1,134 00 | |
| Firemen | 2,109 67 | |
| Machinists | 20,566 24 | |
| Meter repairers and testers | 7,476 09 | |
| Pattern maker | 1,400 00 | |
| Plumbers and helpers | 39,535 61 | |
| Skilled laborers | 37,187 24 | |
| Laborers | 138,857 09 | |
| Yardmen | 5,584 04 | |
| Stablemen | 4,108 50 | |
| Storekeepers | 2,838 52 | |
| Watchmen | 1,732 50 | |
| Military duty | 704 83 | |
| Overtime, charges by other divisions, etc. | 11,916 87 | |
| | | <hr/> |
| | | \$486,878 59 |

B. SERVICE OTHER THAN PERSONAL.

| | | |
|--|-------------|--------------|
| 1. Printing and binding | \$144 85 | |
| 2. Postage | 474 71 | |
| 3. Advertising and posting | 313 18 | |
| 4. Transportation of persons | 3,400 62 | |
| 5. Cartage and freight | 216 70 | |
| 6. Hire of teams | 571 50 | |
| 8. Light and power | 983 46 | |
| 10. Rent and taxes | 1,808 48 | |
| 12. Premium on surety bond | 12 50 | |
| 13. Communication | 1,469 06 | |
| 14. Motor vehicle repairs and care | 3,599 31 | |
| 15. Motorless vehicle repairs | 989 84 | |
| 16. Care of horses | 32 60 | |
| 18. Cleaning | 27 84 | |
| 22. Medical | 75 28 | |
| 23. Veterinary | 293 38 | |
| 24. Blacksmith | 36 80 | |
| 27. Testing materials and supplies | 1,408 16 | |
| 28. Expert and architect | 285 00 | |
| 35. Fees, services of venires | 187 40 | |
| 36. Boiler inspection | 10 00 | |
| | | <hr/> |
| Carried forward | \$16,340 67 | \$486,878 59 |

| | | |
|---|-------------|--------------|
| <i>Brought forward</i> | \$16,340 67 | \$486,878 59 |
| 37. Photographic and blueprinting | 26 78 | |
| 39. General plant repairs | 31,069 01 | |
| 40. Harness repairs | 87 50 | |
| 41. Horseshoeing | 1,162 41 | |
| | <hr/> | 48,686 37 |

C. EQUIPMENT.

| | | |
|-------------------------------------|-----------|-----------|
| 2. Machinery | \$57 60 | |
| 3. Electrical | 92 55 | |
| 4. Motor vehicles | 4,853 46 | |
| 6. Stable | 326 74 | |
| 7. Furniture and fittings | 28 76 | |
| 9. Office | 1,253 69 | |
| 13. Tools and instruments | 42,013 43 | |
| 14. Live stock | 325 00 | |
| 16. Wearing apparel | 223 96 | |
| 17. General plant | 283 28 | |
| | <hr/> | 49,458 47 |

D. SUPPLIES.

| | | |
|---|------------|-----------|
| 1. Office | \$6,962 70 | |
| 2. Food and ice | 36 38 | |
| 3. Fuel | 3,196 62 | |
| 4. Forage and animal | 9,998 90 | |
| 7. Veterinary | 108 37 | |
| 8. Laundry, cleaning and toilet | 89 41 | |
| 11. Motor vehicle | 2,792 57 | |
| 13. Chemicals and disinfectants | 27 00 | |
| 16. General plant | 4,626 66 | |
| | <hr/> | 27,838 61 |

E. MATERIALS.

| | | |
|-----------------------------|------------|------------|
| 1. Building | \$694 88 | |
| 6. Water | 195,790 11 | |
| 10. Electrical | 542 86 | |
| 13. General plant | 1,644 87 | |
| | <hr/> | 198,672 72 |

F. SPECIAL ITEMS.

| | | |
|---|------------|---------------------|
| 2. Damages | \$3,866 05 | |
| 7. Pensions and annuities | 34,414 73 | |
| 11. Workingmen's compensation | 1,824 30 | |
| 12. Contracts | 66,183 80 | |
| | <hr/> | 106,288 88 |
| | | <hr/> |
| | | <u>\$917,823 64</u> |

Details of expenditures under appropriation for service mains and relaying mains for the fiscal year ending January 31, 1917. From revenue, orders City Council, approved August 12, 1913, and October 22, 1914.

| | |
|---|--------------------|
| Laying and relaying water mains | \$36,724 45 |
| Water pipes and castings | 5,664 80 |
| Paving | 5,478 96 |
| | <hr/> |
| | <u>\$47,868 21</u> |

There was also expended by the Water Service, under an appropriation of \$5,000 from the Reserve Fund, \$3,542.62 for ice for drinking fountains. Order City Council, approved June 8, 1915.

AUTOMOBILES.

No. 83. — Emergency Truck.

| | | |
|----------------------------------|----------|------------|
| Registration, etc., | \$2 00 | |
| Tires and tubes, new and repairs | 326 35 | |
| Gasolene, oils, etc. | 303 72 | |
| Repairs and supplies | 882 49 | |
| Chauffeur's wages | 4,382 00 | |
| Total | | \$5,896 56 |

No. 90. — General Foreman.

| | | |
|----------------------------------|--------|--------|
| Registration | \$2 00 | |
| Tires and tubes, new and repairs | 72 75 | |
| Gasolene, oils, etc. | 117 60 | |
| Repairs and supplies | 251 05 | |
| Total | | 443 40 |

No. 96. — Truck, General Work.

| | | |
|----------------------------------|----------|----------|
| Registration | \$2 00 | |
| Tires and tubes, new and repairs | 322 70 | |
| Gasolene, oils, etc. | 237 65 | |
| Repairs and supplies | 281 37 | |
| Chauffeur's wages | 1,095 50 | |
| Total | | 1,939 22 |

No. 98. — Truck, Shut-off Gang.

| | | |
|----------------------------------|----------|----------|
| Registration | \$2 00 | |
| Tires and tubes, new and repairs | 64 55 | |
| Gasolene, oils, etc. | 218 84 | |
| Repairs and supplies | 230 12 | |
| Chauffeur's wages | 1,095 50 | |
| Total | | 1,611 01 |

No. 99. — Truck, West Roxbury District.

| | | |
|----------------------------------|--------|--------|
| Registration | \$2 00 | |
| Tires and tubes, new and repairs | 61 30 | |
| Gasolene, oils, etc. | 100 14 | |
| Repairs and supplies | 193 70 | |
| Storage | 87 00 | |
| Total | | 444 14 |

No. 100. — Engineer in Charge.

| | | |
|----------------------------------|----------|-------------|
| Registration | \$10 00 | |
| Tires and tubes, new and repairs | 137 00 | |
| Gasolene, oils, etc. | 125 99 | |
| Repairs and supplies | 569 63 | |
| Storage | 36 00 | |
| Chauffeur's wages | 1,095 50 | |
| Total | | 1,974 12 |
| Carried forward | | \$12,308 45 |

Brought forward \$12,308 45

No. 101. — Engineer's Meter Branch and District 2.

| | | |
|--|---------|--------|
| Registration | \$13 00 | |
| Tires and tubes, new and repairs | 176 92 | |
| Gasolene, oils, etc. | 127 85 | |
| Repairs and supplies | 594 25 | |
| Total | | 912 02 |

No. 102. — Truck, General Work.

| | | |
|--|--------|----------|
| Registration | \$2 00 | |
| Tires and tubes, new and repairs | 130 31 | |
| Gasolene, oils, etc. | 165 48 | |
| Converting to truck | 98 60 | |
| Repairs and supplies | 449 05 | |
| Chauffeur's wages | 858 00 | |
| Total | | 1,703 44 |

No. 103. — Foreman, Dorchester District.

| | | |
|--|---------|--------|
| Registration | \$10 00 | |
| Tires and tubes, new and repairs | 76 12 | |
| Gasolene, oils, etc. | 61 26 | |
| Repairs and supplies | 179 04 | |
| Total | | 326 42 |

No. 105. — Foreman, Brighton District.

| | | |
|--|---------|--------|
| Registration | \$10 00 | |
| Tires and tubes, new and repairs | 74 65 | |
| Gasolene, oils, etc. | 114 47 | |
| Repairs and supplies | 67 56 | |
| Total | | 266 68 |

No. 107. — Engineer, District No. 1.

| | | |
|--|---------|--------|
| Registration | \$12 50 | |
| Tires and tubes, new and repairs | 136 84 | |
| Gasolene, oils, etc. | 171 44 | |
| Repairs and supplies | 248 31 | |
| Total | | 569 09 |

No. 108. — Truck, Plumbers'.

| | | |
|--|--------|--------|
| Registration | \$2 00 | |
| Tires and tubes, new and repairs | 193 13 | |
| Gasolene, oils, etc. | 149 02 | |
| Repairs and supplies | 243 13 | |
| Total | | 587 28 |

No. 109. — Foreman, West Roxbury District.

| | | |
|--|---------|--------|
| Registration | \$10 00 | |
| Tires and tubes, new and repairs | 24 82 | |
| Gasolene, oils, etc. | 88 19 | |
| Repairs and supplies | 36 59 | |
| Storage | 87 00 | |
| Total | | 246 60 |

Carried forward \$16,919 98

PUBLIC WORKS DEPARTMENT.

477

Brought forward \$16,919 98

No. 110.— Spare Roadster.

| | |
|--|---------|
| Registration | \$20 00 |
| Tires and tubes, new and repairs | 253 06 |
| Gasolene, oils, etc. | 130 94 |
| Repairs and supplies | 798 52 |

Total 1,202 52

No. 111.— Truck, Dorchester District.

| | |
|--|----------|
| New | \$927 94 |
| Registration | 7 00 |
| Tires and tubes, new and repairs | 45 91 |
| Gasolene, oils, etc. | 70 97 |
| Repairs and supplies | 167 05 |
| Chauffeur's wages | 630 00 |

Total 1,848 87

No. 112.— Truck, Meter Branch.

| | |
|--|----------|
| New | \$496 95 |
| Registration | 10 00 |
| Tires and tubes, new and repairs | 49 93 |
| Gasolene, oils, etc. | 84 94 |
| Repairs and supplies | 82 37 |

Total 724 19

No. 113.— Truck, Meter Branch.

| | |
|--|----------|
| New | \$496 95 |
| Registration | 10 00 |
| Tires and tubes, new and repairs | 17 17 |
| Gasolene, oils, etc. | 72 53 |
| Repairs and supplies | 87 47 |

Total 684 12

No. 114.— Foreman, City Proper, South Boston and Roxbury.

| | |
|--|----------|
| New | \$361 60 |
| Registration | 15 00 |
| Tires and tubes, new and repairs | 5 28 |
| Gasolene, oils, etc. | 39 01 |
| Repairs and supplies | 39 14 |

| | |
|----------------------------------|--------|
| Total | 460 03 |
| General work in garage | 441 43 |

\$22,281 14

Comparative Table of Receipts and Expenditures.

Receipts.

| | 1910-11. | 1911-12. | 1912-13. | 1913-14. | 1914-15. | 1915-16. | 1916-17. |
|---------------------------------|----------------|--------------------------------|----------------|----------------|----------------|----------------|----------------|
| Sales of water..... | \$2,764,887 76 | \$2,730,398 37 | \$2,906,569 76 | \$2,947,210 88 | \$2,923,719 09 | \$2,859,707 92 | \$3,037,974 66 |
| Other receipts..... | 64,168 20 | 67,690 88 | 75,674 49 | 84,389 48 | 69,922 86 | 84,977 77 | 71,374 55 |
| | \$2,829,055 96 | \$2,798,089 25 | \$2,982,244 25 | \$3,031,600 36 | \$2,993,641 95 | \$2,944,685 69 | \$3,109,349 21 |
| Credited from taxes..... | | | | | | | |
| Transfers by City Auditor..... | | 31,777 31 | | | | | |
| | \$2,829,055 96 | \$2,829,866 56 | \$2,982,244 25 | \$3,031,600 36 | \$2,993,641 95 | \$2,944,685 69 | \$3,109,349 21 |
| Balance, beginning of year..... | | † \$11,983 69 | \$64,521 97 | \$274,580 54 | \$340,819 49 | \$184,470 24 | \$135,014 40 |
| Balance, end of year..... | \$11,983 69 | { † 31,777 31 † 32,744 66 } | 274,580 54 | 340,819 49 | 184,470 24 | 135,014 40 | 87,146 19 |
| | * \$11,983 69 | \$64,521 97 | | | | | |

Expenditures.

| | 1910-11. | 1911-12. | 1912-13. | 1913-14. | 1914-15. | 1915-16. | 1916-17. |
|------------------------------------|-----------------|-----------------|-----------------|----------------|----------------|----------------|----------------|
| Current expenses..... | \$ \$660,676 10 | \$ \$622,377 46 | \$ \$635,072 00 | \$699,338 91 | \$694,170 14 | \$904,135 19 | \$917,823 64 |
| Service and relaying mains..... | | | | 86,945 40 | 128,584 36 | 49,455 84 | 47,898 21 |
| Metropolitan water assessment..... | 1,815,668 85 | 1,825,362 87 | 1,792,123 83 | 1,942,127 65 | 1,676,038 11 | 1,665,006 20 | 1,669,432 79 |
| Interest..... | 138,460 17 | 127,280 37 | 137,675 37 | 118,673 48 | 94,615 02 | 91,259 22 | 87,866 59 |
| Refunded water rates..... | 2,277 15 | 2,307 58 | 2,060 28 | 1,275 97 | 933 31 | 738 33 | 698 33 |
| | \$2,817,072 27 | \$2,777,328 28 | \$2,707,751 48 | \$2,048,301 41 | \$2,704,340 04 | \$2,710,594 83 | \$2,723,010 56 |

* Taxes.

† Interest.

‡ Amount estimated for current expenses and expenditures; there being no appropriation only.

COST OF CONSTRUCTION AND CONDITION OF WATER DEBT.

| | |
|---|-----------------------|
| Cost of construction of waterworks, February 1, 1917 | \$17,274,932 37 |
| Cost of construction of waterworks, February 1, 1916 | 17,050,801 83 |
| Increase during the year | <u>\$224,130 54</u> |
| Outstanding loans February 1, 1916, at 3½ per cent | \$543,400 00 |
| Outstanding loans February 1, 1916, at 4 per cent | 1,751,550 00 |
| | <u>\$2,294,950 00</u> |
| Outstanding loans February 1, 1917, at 3½ per cent | \$433,400 00 |
| Outstanding loans February 1, 1917, at 4 per cent | 1,714,050 00 |
| | <u>2,147,450 00</u> |
| Decrease during the year | <u>\$147,500 00</u> |
| The Water Sinking Fund February 1, 1916, was | \$1,894,950 00 |
| The Water Sinking Fund February 1, 1917, was | 1,763,450 00 |
| Decrease during the year | <u>\$131,500 00</u> |
| Net Water Debt February 1, 1916 | \$400,000 00 |
| Gross Water Debt February 1, 1917 | \$2,147,450 00 |
| Less Sinking Fund February 1, 1917 | 1,763,450 00 |
| Net Water Debt February 1, 1917 | <u>384,000 00</u> |
| Decrease during the year | <u>\$16,000 00</u> |
| Stock on hand February 1, 1917 | \$242,712 36 |
| Stock on hand February 1, 1916 | 215,937 12 |
| Increase during the year | <u>\$26,775 24</u> |
| Cochituate Water Sinking Fund Receipts, 1916-17: | |
| Interest on investments | \$61,709 26 |
| Interest on bank deposits | 2,913 67 |
| | <u>\$64,622 93</u> |

COST OF EXISTING WORKS ON JANUARY 31, 1917.

| | |
|--|-----------------|
| East Boston Reservoir | \$66,103 09 |
| East Boston high service | 24,173 26 |
| Pipe yards and buildings | 94,832 16 |
| Engineering expenses | 57,873 58 |
| Distribution system (additions during year, \$246,477.10), | 16,563,950 28 |
| Hyde Park waterworks | 468,000 00 |
| | \$17,274,932 37 |

West Roxbury high service plant abolished May 24, 1916. The cost (\$22,346.56) is therefore dropped from the above table.

WASTE PREVENTION BRANCH.

This force consists of six inspectors under the direction of a chief inspector, and they have been continuously employed in locating and in stopping waste both inside of unmetered premises and generally throughout the distribution system. The consumption for the year being practically that of 1915 is partly due to the effective work of this branch.

Table I.
Waste Prevention.

| | |
|------------------------------------|--------|
| Premises examined | 46,908 |
| Special investigations | 1,231 |
| Waste reports | 8,713 |
| Re-examined | 9,442 |
| Found repaired | 8,494 |
| Not repaired | 948 |
| Water shut off for waste | 15 |

Table II.
Defective Fixtures and Waste.

| | |
|--|-------|
| Tank fixtures leaking | 4,385 |
| Faucets leaking | 2,979 |
| Hopper cocks leaking | 56 |
| Pipes inside leaking | 332 |
| Pipes outside leaking | 97 |
| Metered premises with defective fixtures | 823 |
| Hydrants leaking | 6 |
| Willful waste | 30 |

INCOME BRANCH.

This branch consists of a superintendent, deputy superintendent, twenty-three clerks, twenty-seven meter readers for the reading of 65,000 meters, thirteen inspectors for examination of about 30,000 accounts on annual rates, investigating complaints, etc.

The financial statement of the year shows that the efficiency of this branch has been maintained. The following tables give in detail the operations of the year:

INCOME BRANCH.

Table I.

Statement of Water Rates January 31, 1917.

| ACCOUNT OF YEAR. | Amount Assessed. | Amount Abated. | Amount Collected. | Balance Outstanding. |
|---------------------|---------------------|-------------------|----------------------|-------------------------|
| 1901..... | \$2,284,845 26 | \$46,713 28 | ..... | ..... |
| 1902..... | 2,327,996 91 | 43,706 89 | \$2,284,290 02 | ..... |
| 1903..... | 2,386,428 02 | 58,050 51 | 2,328,347 51 | \$30 00 |
| 1904..... | 2,391,751 16 | 38,290 92 | 2,352,679 94 | 780 30 |
| 1905..... | 2,446,978 39 | 36,093 08 | 2,410,871 31 | 14 00 |
| 1906..... | 2,524,205 25 | 37,599 28 | 2,486,605 97 | ..... |
| 1907..... | 2,619,031 00 | 34,959 33 | 2,584,071 67 | ..... |
| 1908..... | 2,645,962 55 | 36,549 98 | 2,609,023 23 | 389 34 |
| 1909..... | 2,694,408 57 | 48,451 64 | 2,645,001 13 | 955 80 |
| 1910..... | 2,846,000 66 | † 117,818 49 | 2,728,182 17 | ..... |
| 1911..... | 2,863,497 95 | † 61,777 95 | † 2,798,055 28 | 3,664 72 |
| 1912..... | 3,001,771 87 | 41,251 26 | 2,943,402 48 | 17,118 13 |
| 1913..... | 3,004,256 87 | 37,205 39 | 2,954,173 62 | 12,877 86 |
| 1914..... | 3,034,885 83 | 23,509 74 | 2,970,192 76 | 41,183 33 |
| 1915..... | 2,960,797 45 | 14,971 08 | 2,901,848 41 | 43,977 96 |
| 1916..... | 3,127,489 24 | 12,405 38 | 2,800,305 64 | 235,546 58 |
| 1917..... | * 438,478 87 | 898 33 | 63,991 11 | 373,589 43 |

* The statement of water rates for 1917 represents annual accounts only, as the quarterly meter accounts cannot be estimated at this time.

† This amount includes certain city department accounts abated by order of the Mayor.

‡ \$875.11 for Hyde Park water rates do not appear in this column; were not assessed on our books.

Table II.*Estimated Kind and Number of Fixtures in Use January 1, 1917.*

| | |
|---|------------------|
| Bathtubs..... | 133,690 |
| Bowls..... | 172,715 |
| Foot baths..... | 156 |
| Sinks..... | 237,612 |
| Taps (other than sinks, bowls, etc.)..... | 44,481 |
| Urinals, automatic..... | 6,988 |
| Urinals, otherwise..... | 590 |
| Washtubs..... | 205,821 |
| Water-closets..... | 243,795 |
| Total..... | 1,045,848 |

Table III.*Number and Amount of Abatelements Allowed During the Year 1916.*

| ON ACCOUNT OF ASSESSMENT FOR YEAR. | Number. | Amount. |
|------------------------------------|--------------|--------------------|
| 1914..... | 8 | \$259 42 |
| 1915..... | 186 | 1,852 21 |
| 1916..... | 1,240 | 11,663 08 |
| Totals..... | 1,434 | \$13,774 71 |

Table IV.*Applications for New Pipes During the Year 1916.*

| | |
|--------------------|--------------|
| Elevators..... | 5 |
| Fire pipes..... | 293 |
| Service pipes..... | 1,377 |
| Total..... | 1,675 |

Table V.*Turning Water Off and On During the Year 1916.*

| | |
|---|---------------|
| For complaints (no force, stoppages, etc.)..... | 391 |
| For repairs of service pipes..... | 5,495 |
| For nonpayment of water bills..... | 1,126 |
| For waste..... | 3 |
| Turned on first time..... | 1,504 |
| Vacancies..... | 2,068 |
| Total..... | 10,587 |

Table VI.

Motors.

| | |
|---|----|
| Under supervision December 31, 1915 | 98 |
| Discontinued during the year | 6 |
| New motors accepted during the year | 4 |
| Under supervision December 31, 1916 | 96 |
| Motors on meter | 22 |

Table VII.

Elevators.

| | |
|--|-----|
| Under supervision December 31, 1915 | 534 |
| Discontinued during the year | 18 |
| Changed to electric | 12 |
| New elevators accepted during the year | 6 |
| Under supervision December 31, 1916 | 510 |
| Changed to tank, metered water and now under supervision | 2 |
| Registering inaccurately | 46 |
| Clock cords broken and repaired by owner | 156 |
| Clock hands broken and repaired by owner | 26 |

Table VIII.

Fire Pipes.

| | |
|---|--------|
| Under supervision December 31, 1915 | 1,068 |
| Fire pipes accepted during the year | 293 |
| Under supervision December 31, 1916 | 1,361 |
| Fire pipe systems inspected during the year | 4,218 |
| Fire pipe valves inspected during the year | 55,376 |
| Hydrant valves inspected during the year | 600 |
| Hydrant valves sealed during the year | 200 |
| Fire pipe valves sealed during the year | 4,680 |

METER BRANCH.

The meter branch has a force which averages about fifty, comprising a general foreman, a foreman for the outside installation, five clerks, twelve plumbers with a corresponding number of assistants, eight meter testers and repairers, etc.

During the year the work of installing meters in compliance with chapter 520 of the Acts of 1907 has continued. In addition to installing 1,209 meters on new service pipes the outside force, comprising sixteen men under the direction of a foreman, has set 5,536 meters on existing service pipes in Wards 11, 13 and 14, and on February 1, 1917, all services in Charlestown, East Boston, South Boston, city proper, Hyde Park, Wards 13 and 14 of Roxbury and Ward 11 of Dorchester are metered. There remains about 27,000 service pipes yet to be metered, which, at the present rate of progress, will be completed in about five years.

METER BRANCH.

Table No. 1.

Statement of Work Done During the Year.

| MAKE. | New Sets. | Discontinued. | CHANGED. | | Tested. | Repaired in Shop. | Repaired in Service. | Remota. |
|-----------------------|-----------|---------------|----------|-------|---------|-------------------|----------------------|---------|
| | | | In. | Out. | | | | |
| Hersey disc..... | 5,227 | 612 | 3,384 | 3,247 | 12,906 | 3,603 | 429 | 234 |
| Worthington disc..... | 1,597 | 100 | 1,070 | 897 | 3,667 | 910 | 141 | 149 |
| Crown..... | 109 | 48 | 249 | 307 | 617 | 283 | 85 | 21 |
| Hersey rotary..... | 58 | 22 | 128 | 173 | 302 | 120 | 25 | 18 |
| American..... | 52 | 18 | 93 | 194 | 356 | 152 | 12 | 7 |
| Nash..... | 35 | 12 | 88 | 131 | 248 | 103 | 11 | 1 |
| Lambert..... | 18 | 7 | 49 | 83 | 144 | 63 | 15 | 1 |
| Trident..... | 6 | 2 | 21 | 35 | 80 | 32 | 6 | 1 |
| Keystone..... | 3 | 3 | 21 | 35 | 62 | 28 | 2 | ..... |
| Empire..... | 36 | ..... | 47 | 18 | 116 | 95 | 3 | 6 |
| Worthington..... | ..... | ..... | ..... | 27 | 26 | ..... | ..... | ..... |
| Standard..... | ..... | ..... | ..... | 1 | 1 | ..... | ..... | ..... |
| Metropolitan..... | ..... | ..... | ..... | 2 | 1 | ..... | ..... | ..... |
| Hersey detector..... | 2 | ..... | ..... | ..... | ..... | ..... | 16 | ..... |
| Gem..... | ..... | 1 | 1 | 1 | 2 | 1 | 3 | ..... |
| Hersey compound..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Union..... | ..... | ..... | ..... | ..... | 1 | 1 | ..... | ..... |
| Totals..... | 7,144 | 825 | 5,151 | 5,151 | 18,529 | 5,391 | 688 | 438 |

Table No. II.

Meters in Stock February 1, 1917.

| MAKE. | DIAMETER IN INCHES. | | | | | | | | | Totals. |
|-----------------------|---------------------|---------------|------|-----------------|------|------|------|------|------|---------|
| | $\frac{1}{2}$ | $\frac{3}{4}$ | 1 | 1 $\frac{1}{2}$ | 2 | 3 | 4 | 6 | 8 | |
| Hersey disc..... | 1,211 | 38 | 14 | 55 | 13 | 18 | 1 | .... | .... | 1,350 |
| Worthington disc..... | 249 | 4 | .... | .... | 1 | .... | .... | .... | .... | 254 |
| Crown..... | 230 | 106 | 44 | 23 | 27 | 5 | 3 | 4 | .... | 442 |
| American..... | 73 | 29 | .... | .... | .... | .... | .... | .... | .... | 107 |
| Hersey rotary..... | 71 | 89 | 19 | 21 | 14 | 4 | 1 | 2 | .... | 221 |
| Naah..... | 51 | 16 | 6 | 4 | 6 | 1 | .... | .... | .... | 84 |
| Lambert..... | 34 | 7 | 1 | 1 | 1 | .... | 1 | .... | .... | 45 |
| Trident..... | 21 | 2 | 3 | .... | 1 | .... | .... | .... | .... | 27 |
| Keystone..... | 18 | 11 | .... | 1 | 2 | 2 | .... | 2 | .... | 36 |
| Empire..... | 13 | 1 | 1 | 1 | .... | .... | .... | .... | .... | 16 |
| Standard..... | 4 | .... | .... | 1 | .... | .... | .... | .... | .... | 5 |
| Gem..... | .... | .... | .... | .... | 2 | 4 | 5 | 3 | .... | 14 |
| Hersey detector..... | .... | .... | .... | .... | .... | .... | 1 | 1 | 2 | 4 |
| Hersey torrent..... | .... | .... | .... | .... | .... | .... | .... | 1 | .... | 1 |
| Totals..... | 1,980 | 303 | 88 | 107 | 67 | 34 | 12 | 13 | 2 | 2,606 |

Table No. III.

Meters in Service February 1, 1917.

| MAKE. | DIAMETER IN INCHES. | | | | | | | | | | | | Totals. |
|--------------------------|---------------------|---------------|-------|----------------|----------------|-----|-----|-----|----|---|----|--------|---------|
| | $\frac{1}{2}$ | $\frac{3}{4}$ | 1 | $1\frac{1}{2}$ | $1\frac{3}{4}$ | 2 | 3 | 4 | 6 | 8 | 12 | | |
| Hersey disc..... | 42,460 | 2,844 | 1,425 | 1 | 661 | 245 | 108 | 30 | 2 | | | 47,776 | |
| Hersey rotary..... | 324 | 268 | 251 | | 153 | 139 | 53 | 26 | 11 | | | 1,225 | |
| Hersey detector..... | | | | | | | 3 | 12 | 20 | 8 | 1 | 44 | |
| Crown..... | 841 | 416 | 357 | | 194 | 168 | 91 | 53 | 11 | | | 2,131 | |
| Nash..... | 425 | 226 | 134 | | 40 | 33 | 2 | | | | | 860 | |
| Lambert..... | 292 | 112 | 73 | | 13 | 17 | | 3 | | | | 510 | |
| Trident..... | 172 | 2 | 2 | | 4 | 4 | | | 1 | | | 185 | |
| Worthington..... | 1 | 16 | 52 | | 12 | 15 | 2 | 3 | | | | 101 | |
| Worthington disc..... | 6,402 | 38 | 6 | | | 17 | | | | | | 6,463 | |
| Keystone..... | 160 | 74 | 22 | | 1 | 1 | 7 | | | | | 265 | |
| Metropolitan..... | | 20 | 2 | | | | | | | | | 22 | |
| American..... | 940 | 463 | | | | | | | | | | 1,403 | |
| Worthington turbine..... | | | | | | | | 1 | | | | 1 | |
| Empire..... | 125 | 2 | 4 | | 6 | | | | | | | 137 | |
| Gem..... | | | | | | 1 | | 2 | 6 | | | 9 | |
| Standard..... | 7 | | | | | | | | | | | 7 | |
| B. W. W..... | | 1 | | | | | | | | | | 1 | |
| Thompson..... | 6 | 2 | | | | | | | | | | 8 | |
| Union..... | 2 | 1 | | | | | | | | | | 3 | |
| Gamon..... | 1 | | | | | | | | | | | 1 | |
| Hersey compound..... | | | | | | | | | 2 | | | 2 | |
| Totals..... | 52,158 | 4,485 | 2,328 | 1 | 1,084 | 640 | 266 | 130 | 53 | 8 | 1 | 61,154 | |

Table No. IV.

Meters Purchased.

| MAKE. | DIAMETER IN INCHES. | | | | | | | Totals |
|----------------------|---------------------|-----|----------------|----|---|-----|-----|--------|
| | $\frac{1}{2}$ | 1 | $1\frac{1}{2}$ | 3 | 4 | 6 | 8 | |
| Hersey disc..... | 5,500 | 150 | 50 | 25 | 6 | ... | ... | 5,731 |
| Hersey detector..... | | | | | 1 | 2 | 2 | 5 |
| Hersey compound..... | | | | | | 2 | ... | 2 |
| Totals..... | 5,500 | 150 | 50 | 25 | 7 | 4 | 2 | 5,738 |

Table No. V.
Meters Condemned.

| MAKE. | DIAMETER IN INCHES. | | | | | | | Totals. |
|-----------------------|---------------------|---------------|-------|-----------------|-------|-------|-------|---------|
| | $\frac{1}{2}$ | $\frac{3}{4}$ | 1 | 1 $\frac{1}{2}$ | 2 | 3 | 4 | |
| Hersey disc..... | 72 | 2 | ..... | ..... | ..... | 1 | ..... | 75 |
| Worthington disc..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | 1 |
| Crown..... | 16 | 3 | ..... | 1 | ..... | 11 | 6 | 37 |
| Hersey rotary..... | 10 | ..... | 1 | ..... | ..... | ..... | ..... | 11 |
| American..... | 2 | ..... | ..... | ..... | ..... | ..... | ..... | 2 |
| Nash..... | 6 | 1 | ..... | ..... | ..... | ..... | ..... | 7 |
| Lambert..... | 2 | ..... | ..... | ..... | 1 | ..... | ..... | 3 |
| Worthington..... | ..... | 6 | 15 | 4 | 1 | 2 | ..... | 28 |
| Empire..... | 4 | ..... | ..... | 1 | ..... | ..... | ..... | 5 |
| Metropolitan..... | ..... | 1 | ..... | 1 | ..... | ..... | ..... | 2 |
| Totals..... | 113 | 13 | 16 | 7 | 2 | 14 | 6 | 171 |

Table No. VI.
Meters Repaired in Service.

| MAKE. | CAUSES. | | | | | | | Totals. |
|-----------------------|---------------|---------------|---------------|---------------|----------------|------------|----------------|---------|
| | Glass Broken. | Clock Broken. | Cover Broken. | Spindle Leak. | Coupling Leak. | Relocated. | Miscellaneous. | |
| Hersey disc..... | 35 | 41 | 4 | 239 | 75 | 2 | 33 | 429 |
| Worthington disc..... | ..... | 2 | 3 | 124 | 7 | ..... | 5 | 141 |
| Crown..... | 4 | 9 | ..... | 7 | 5 | ..... | ..... | 25 |
| Hersey rotary..... | 3 | 8 | ..... | 7 | 6 | ..... | 1 | 25 |
| American..... | 2 | ..... | ..... | 4 | 3 | ..... | 3 | 12 |
| Nash..... | 1 | 1 | 1 | 6 | 2 | ..... | ..... | 11 |
| Lambert..... | ..... | ..... | ..... | 12 | 3 | ..... | ..... | 15 |
| Trident..... | 2 | 2 | ..... | 2 | ..... | ..... | ..... | 6 |
| Keystone..... | ..... | ..... | ..... | 2 | ..... | ..... | ..... | 2 |
| Empire..... | ..... | ..... | ..... | 3 | ..... | ..... | ..... | 3 |
| Hersey detector..... | 3 | 11 | ..... | ..... | ..... | ..... | 2 | 16 |
| Gem..... | 2 | ..... | ..... | ..... | ..... | ..... | 1 | 3 |
| Totals..... | 52 | 74 | 8 | 406 | 101 | 2 | 45 | 688 |

Table No. VII.
Meter Changes.

| MAKE. | METERS IN. | | | | | | | | | | METERS OUT. | | | | | | | | | | Totals. |
|-----------------------|---------------------|-------|-------|-------|-------|-------|---------|-------|-------|-------|---------------------|-------|-------|-------|-------|-------|-------|--|--|--|---------|
| | DIAMETER IN INCHES. | | | | | | | | | | DIAMETER IN INCHES. | | | | | | | | | | |
| | 1 | 1 1/2 | 2 | 3 | 4 | 6 | Totals. | 1 | 1 1/2 | 2 | 3 | 4 | 6 | | | | | | | | |
| Hersey disc..... | 2,267 | 372 | 169 | 88 | 56 | 29 | 3 | 3,384 | 2,742 | 257 | 114 | 39 | 70 | 24 | 1 | ..... | 3,247 | | | | |
| Worthington disc..... | 1,065 | 1 | 1 | ..... | 3 | ..... | ..... | 1,070 | 885 | 7 | 3 | 2 | ..... | ..... | ..... | ..... | 897 | | | | |
| Crown..... | 108 | 38 | 34 | 26 | 22 | 11 | 4 | 249 | 110 | 69 | 47 | 29 | 29 | 13 | 4 | 6 | 307 | | | | |
| Hersey rotary..... | 38 | 27 | 24 | 10 | 19 | 8 | 2 | 128 | 48 | 47 | 31 | 18 | 18 | 10 | 1 | ..... | 173 | | | | |
| American..... | 58 | 35 | ..... | ..... | ..... | ..... | ..... | 93 | 132 | 62 | ..... | ..... | ..... | ..... | ..... | ..... | 194 | | | | |
| Nash..... | 48 | 23 | 10 | 4 | 3 | ..... | ..... | 88 | 69 | 36 | 18 | 3 | 5 | ..... | ..... | ..... | 131 | | | | |
| Lambert..... | 34 | 8 | 4 | 2 | 1 | ..... | ..... | 49 | 56 | 13 | 9 | 3 | 2 | ..... | ..... | ..... | 83 | | | | |
| Trident..... | 19 | 1 | 1 | ..... | ..... | ..... | ..... | 21 | 32 | 1 | 2 | ..... | ..... | ..... | ..... | ..... | 35 | | | | |
| Keystone..... | 10 | 8 | 2 | ..... | ..... | 1 | ..... | 21 | 18 | 13 | 1 | 1 | ..... | 2 | ..... | ..... | 35 | | | | |
| Empire..... | 46 | ..... | 1 | ..... | ..... | ..... | ..... | 47 | 15 | 1 | 1 | ..... | 1 | ..... | ..... | ..... | 18 | | | | |
| Worthington..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 6 | 14 | 1 | 4 | 2 | ..... | ..... | 27 | | | | |
| Standard..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 | | | | |
| Metropolitan..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 | ..... | ..... | 1 | ..... | ..... | ..... | 2 | | | | |
| Gem..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 | | | | |
| Totals..... | 4,093 | 513 | 246 | 130 | 104 | 49 | 9 | 5,151 | 4,108 | 513 | 240 | 96 | 130 | 51 | 6 | 7 | 5,151 | | | | |

Table No. VIII.

Causes For Which Meters Were Changed.

| MAKE. | Test. | Not Registering. | No Force. | Stoppage. | Enlarged. | Spindle Leak. | Coupling Leak. | Frost. | Set Backwards. | Relocated. | Clock Defaced or Broken. | Leak at Flange. | Miscellaneous. | Totals. |
|-------------------------|-------|------------------|-----------|-----------|-----------|---------------|----------------|--------|----------------|------------|--------------------------|-----------------|----------------|---------|
| Hersey disc | 412 | 1,066 | 99 | 16 | 13 | 95 | 54 | 754 | 21 | 13 | 419 | 114 | 171 | 3,247 |
| Worthington disc . . . | 45 | 381 | 15 | 2 | 1 | 154 | 15 | 158 | 9 | 2 | 17 | 34 | 64 | 897 |
| Crown | 78 | 111 | 10 | 2 | 4 | 15 | 4 | 10 | 1 | 2 | 49 | 4 | 17 | 307 |
| Hersey rotary | 36 | 85 | 6 | ... | 3 | 8 | ... | 8 | ... | ... | 21 | 2 | 4 | 173 |
| American | 21 | 96 | 2 | ... | ... | 10 | 3 | 15 | 2 | ... | 39 | 1 | 5 | 194 |
| Nash | 29 | 50 | 9 | 2 | ... | 4 | ... | 13 | ... | ... | 16 | 1 | 7 | 131 |
| Lambert | 13 | 20 | 1 | ... | 1 | 14 | 4 | 12 | ... | ... | 15 | ... | 3 | 83 |
| Trident | 2 | 20 | ... | ... | ... | 3 | 4 | 1 | ... | ... | 5 | ... | ... | 35 |
| Keystone | 4 | 13 | 1 | ... | ... | 1 | 2 | 4 | ... | ... | 8 | 1 | 1 | 35 |
| Empire | 5 | 4 | 3 | 1 | ... | 1 | 1 | 2 | ... | ... | ... | ... | 1 | 18 |
| Worthington | 10 | 4 | 2 | 1 | ... | 1 | 1 | ... | ... | ... | 7 | ... | 1 | 27 |
| Standard | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Metropolitan | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Gem | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Totals | 656 | 1,853 | 148 | 24 | 22 | 306 | 88 | 977 | 33 | 17 | 506 | 157 | 274 | 5,151 |

Table No. IX.

Meters Applied.

| MAKE. | DIAMETER IN INCHES. | | | | | | | | | | Totals. |
|-----------------------|---------------------|---------------|-----|-----------------|-----|-----|-----|-----|-----|-------|---------|
| | $\frac{1}{8}$ | $\frac{1}{4}$ | 1 | 1 $\frac{1}{2}$ | 2 | 3 | 4 | 6 | 12 | | |
| Hersey disc..... | 4,959 | 118 | 100 | 30 | 10 | 7 | 3 | ... | ... | 5,227 | |
| Worthington disc..... | 1,593 | 2 | 2 | ... | ... | ... | ... | ... | ... | 1,597 | |
| Crown..... | 27 | 24 | 35 | 10 | 10 | 1 | 2 | ... | ... | 109 | |
| Hersey rotary..... | 8 | 10 | 20 | 4 | 16 | ... | ... | ... | ... | 58 | |
| American..... | 42 | 10 | ... | ... | ... | ... | ... | ... | ... | 52 | |
| Nash..... | 12 | 14 | 8 | 1 | ... | ... | ... | ... | ... | 35 | |
| Lambert..... | 7 | 6 | 4 | 1 | ... | ... | ... | ... | ... | 18 | |
| Trident..... | 2 | ... | 1 | 2 | 1 | ... | ... | ... | ... | 6 | |
| Keystone..... | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | 3 | |
| Empire..... | 36 | ... | ... | ... | ... | ... | ... | ... | ... | 36 | |
| Hersey detector..... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | 2 | |
| Hersey compound..... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | |
| Totals..... | 6,688 | 185 | 170 | 48 | 37 | 8 | 5 | 2 | 1* | 7,144 | |

* Of this number 453 meters were set in outside boxes; 557 meters were set in ground boxes.

Table No. X.

Meters Owned February 1, 1917.

| MAKE. | DIAMETER IN INCHES. | | | | | | | | | | | Totals. |
|---------------------------|---------------------|-------|-------|-----|-------|-----|-----|-----|-----|-----|-----|---------|
| | 1½ | 1 | 1 | 1½ | 1½ | 2 | 3 | 4 | 6 | 8 | 12 | |
| Hersey disc | 43,671 | 2,882 | 1,439 | 1 | 716 | 258 | 126 | 31 | 2 | ... | ... | 49,126 |
| Hersey rotary | 395 | 357 | 270 | ... | 174 | 153 | 57 | 27 | 13 | ... | ... | 1,446 |
| Hersey detector | ... | ... | ... | ... | ... | ... | 3 | 13 | 21 | 10 | 1 | 48 |
| Crown | 1,071 | 522 | 401 | ... | 217 | 195 | 96 | 56 | 15 | ... | ... | 2,573 |
| Nash | 476 | 242 | 140 | ... | 44 | 39 | 3 | ... | ... | ... | ... | 944 |
| Lambert | 326 | 119 | 74 | ... | 14 | 18 | ... | 4 | ... | ... | ... | 555 |
| Trident | 193 | 4 | 5 | ... | 4 | 5 | ... | ... | 1 | ... | ... | 212 |
| Worthington | 1 | 16 | 52 | ... | 12 | 15 | 2 | 3 | ... | ... | ... | 101 |
| Worthington disc | 6,651 | 42 | 6 | ... | 18 | ... | ... | ... | ... | ... | ... | 6,717 |
| Keystone | 178 | 85 | 22 | ... | 2 | 3 | 9 | ... | 2 | ... | ... | 301 |
| Metropolitan | ... | 20 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 22 |
| American | 1,018 | 492 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1,510 |
| Worthington turbine | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 1 |
| Hersey torrent | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 |
| Empire | 138 | 3 | 5 | ... | 7 | ... | ... | ... | ... | ... | ... | 153 |
| Gem | ... | ... | ... | ... | ... | 3 | 4 | 7 | 9 | ... | ... | 23 |
| Standard | 11 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 12 |
| B. W. W. | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Thomson | 6 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 8 |
| Union | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 |
| Gamon | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Hersey compound | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | 2 |
| Totals | 54,338 | 4,788 | 2,416 | 1 | 1,209 | 689 | 300 | 142 | 66 | 10 | 1 | 63,760 |

DISTRIBUTION BRANCH.

The organization of this branch is a central yard at 710 Albany street and six outlying yards in East Boston, Charlestown, Brighton, Dorchester, West Roxbury and Hyde Park. The average force comprises 350 men under the direction of a general foreman and seven foremen in charge of districts. At the central yard is a machine shop, plumbing shop, carpenter shop and blacksmith shop. The work done by this branch consists both of construction, including the manufacture of

gates, hydrants, service cocks, etc., and the maintenance of the water system, this calling for a wide variety of important work which must be done quickly and properly under any and all circumstances. To maintain the efficiency of the branch an automobile emergency service has headquarters at 710 Albany street, said service being divided into three shifts with a gang of men on call during the entire twenty-four hours of each day.

The following tables, Nos. 1 to 29, give details of the work done by this branch with cost where the same could be determined.

Table No. 1.—Distribution Branch.

Showing Length of Main Lines of Water Pipes and Connections Owned and Operated by the Public Works Department, Highway Division (Water Service), and Number of Valves in Same, January 31, 1917.

| DIAMETER OF PIPES IN INCHES. | | | | | | | | | | | | | | | | | | Totals. |
|--|--------|--------|--------|--------|-----|--------|--------|---------|-------|-----------|---------|---------|-----------|---------|-------|-------|-----------|---------|
| 48 | 42 | 40 | 36 | 30 | 28 | 24 | 20 | 16 | 14 | 12 | 10 | 8 | 6 | 4 | 3 | 2 | | |
| 10,637 | 15,476 | 16,105 | 37,128 | 89,337 | 244 | 75,562 | 87,611 | 251,190 | 5,021 | 1,401,111 | 336,169 | 781,784 | 1,271,111 | 108,878 | 6,883 | 5,872 | 4,500,119 | |
| 8 | 4 | 8 | 18 | 57 | ... | 66 | 79 | 525 | 20 | 3,226 | 1,097 | 2,510 | 3,989 | 614 | 16 | 12 | 12,249 | |
| 12 | 3 | 7 | 27 | 91 | 2 | 39 | 42 | 45 | ... | 33 | 37 | 84 | 109 | 55 | 5 | 1 | 306 | |
| 1 | 3 | 3 | 8 | 32 | ... | 18 | 44 | 60 | ... | 145 | 37 | 84 | 109 | 55 | 5 | 1 | 605 | |
| Length laid and relaid during year 1916-17..... | | | | | | | | | | | | | | | | | | |
| ... | ... | ... | ... | 2,826 | ... | 3,690 | 311 | 950 | ... | 28,904 | 24,571 | 23,491 | 1,741 | 57 | ... | 247 | 86,788 | |
| ... | ... | ... | ... | 2 | ... | 4 | 1 | 14 | ... | 116 | 85 | 94 | 16 | 5 | ... | ... | 336 | |
| ... | ... | ... | ... | 8 | ... | 6 | 1 | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 17 | |
| ... | ... | ... | ... | 2 | ... | 2 | 2 | 1 | ... | 4 | 8 | 18 | 6 | ... | ... | ... | 41 | |
| Length abandoned during year 1916-17..... | | | | | | | | | | | | | | | | | | |
| ... | ... | ... | ... | 168 | ... | 6 | 91 | 656 | ... | 3,568 | 1,945 | 1,716 | 12,457 | 2,123 | 56 | 397 | 23,183 | |
| ... | ... | ... | ... | 1 | ... | ... | 1 | 2 | ... | 9 | 5 | 7 | 38 | 9 | ... | ... | 71 | |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 3 | |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | ... | 16 | |
| Length owned and operated January 31, 1917 (feet)..... | | | | | | | | | | | | | | | | | | |
| 10,637 | 15,476 | 16,105 | 37,128 | 91,995 | 244 | 79,246 | 87,831 | 251,484 | 5,021 | 1,428,447 | 358,795 | 803,559 | 1,260,395 | 106,812 | 6,827 | 5,722 | 4,563,724 | |
| 8 | 4 | 8 | 18 | 59 | ... | 70 | 78 | 537 | 20 | 3,333 | 1,177 | 2,597 | 3,967 | 610 | 16 | 12 | 12,514 | |
| 12 | 3 | 7 | 27 | 98 | 2 | 46 | 43 | 45 | ... | 33 | 37 | 84 | 109 | 55 | 5 | 1 | 320 | |
| 1 | 3 | 3 | 8 | 34 | ... | 20 | 44 | 61 | ... | 147 | 39 | 98 | 113 | 63 | 5 | 1 | 630 | |
| Blow-offs in same..... | | | | | | | | | | | | | | | | | | |

* 864.34 miles in system.

Table No. II.
Statement of Hydrant, Blow-off and Reservoir Pipes.

| | DIAMETER IN INCHES. | | | | | | | | Totals. |
|--|---------------------|-------|-----|-------|-------|--------|-------|----|---------|
| | 16 | 12 | 10 | 9 | 8 | 6 | 4 | 3 | |
| Total length connected with system January 31, 1916..... | 29 | 5,756 | 176 | 1,944 | 5,453 | 57,815 | 6,557 | 44 | 77,774 |
| Length laid and relaid during year..... | | 25 | | | 114 | 2,181 | 29 | | 2,349 |
| Length abandoned during year..... | | | | | 39 | 521 | 92 | | 652 |
| Total length connected with system January 31, 1917..... | 29 | 5,781 | 176 | 1,944 | 5,528 | 59,475 | 6,494 | 44 | 79,471 |

Table No. III.

Total Number of Hydrants in System January 31, 1917.

| | Lowry. | Boston Lowry. | Boston Post. | Ordinary Post. | Boston. | Chapman Post. | Coffin Post. | Ludlow Post. | Matthews Post. | Totals. |
|--|--------|---------------|--------------|----------------|---------|---------------|--------------|--------------|----------------|---------|
| City proper (public)..... | 550 | 43 | 665 | 181 | 75 | | | | | 1,514 |
| " (private)..... | 4 | | 9 | 6 | 39 | | | | | 58 |
| Roxbury (public)..... | 399 | 68 | 575 | 381 | 30 | | | | | 1,453 |
| " (private)..... | 2 | 1 | 3 | 2 | 10 | | | | | 18 |
| West Roxbury (public)..... | 73 | 193 | 558 | 715 | 19 | | | | | 1,558 |
| " (private)..... | | | | 16 | 1 | | | | | 17 |
| Brighton (public)..... | 59 | 64 | 305 | 410 | 14 | | | | | 852 |
| " (private)..... | | | | 8 | 2 | | | | | 10 |
| Dorchester (public)..... | 305 | 185 | 731 | 1,000 | 24 | | | | | 2,245 |
| " (private)..... | | 1 | 8 | 1 | 4 | | | | | 14 |
| South Boston (public)..... | 156 | 32 | 298 | 137 | 25 | | | | | 648 |
| " (private)..... | 3 | | | 15 | 27 | | | | | 45 |
| East Boston (public)..... | 52 | 21 | 255 | 166 | 6 | | | | | 503 |
| " (private)..... | 8 | | | 7 | 25 | | | | | 40 |
| Charlestown (public)..... | 112 | 41 | 164 | 29 | 2 | | | | | 348 |
| " (private)..... | 13 | 1 | | 37 | 5 | | | | | 56 |
| Deer Island (private)..... | | | 1 | 20 | | | | | | 21 |
| Long Island (private)..... | | | | 6 | | | | | | 6 |
| Thompson's Island (private)..... | | | | 2 | | | | | | 2 |
| Gallop's Island (private)..... | | | | 3 | 1 | | | | | 4 |
| Rainsford Island (private)..... | | | | 3 | 1 | | | | | 4 |
| Quincy..... | | | | 9 | | | | | | 9 |
| Hyde Park (public)..... | | 2 | 29 | 204 | | 161 | 1 | 10 | | 407 |
| " (private)..... | | | | | | 55 | | 13 | 4 | 72 |
| Total number (public)..... | 1,706 | 649 | 3,580 | 3,226 | 195 | 161 | 1 | 10 | | 9,528 |
| Total number (private and suburban)..... | 30 | 3 | 21 | 135 | 115 | 55 | | 13 | 4 | 376 |

Lowry hydrants are set on the main pipe — the barrel comes to within five inches of the road surface, enclosed in a box whose frame and cover are flush with road surface. To use this style of hydrant a chuck having either one 2½-inch outlet or two 2½-inch outlets and one 4½-inch outlet, each controlled by an independent valve, is connected to Lowry hydrant barrel.

Boston Lowry hydrants are set in the sidewalk; in all other respects they are similar to the Lowry hydrants.

Boston Post hydrants are designed and made in the Water Service Machine Shop, are set in the sidewalk and have two 4½-inch and one 2½-inch outlets controlled by independent valves in addition to a main valve.

Ordinary post hydrants are set in the sidewalk and have one 4½-inch and two 2½-inch outlets without independent valves, the only valve in hydrant being the main valve.

Boston hydrants are the original hydrants used in Boston and consist of a 2½-inch pipe coming to within five inches of street surface controlled by a valve. The number now in service are located in alleys, etc., and are used only for blow-off purposes.

Chapman, Coffin, Ludlow and Matthews post hydrants are commercial hydrants set in Hyde Park and acquired by the Water Service in the annexation of the town of Hyde Park to Boston.

Table No. IV.

*Total Number and Aggregate Length of Service Pipes of Various Sizes
Connected with System January 31, 1917.*

| SIZE. | Total Number. | Aggregate Length in Linear Feet. |
|----------------------------|---------------|-------------------------------------|
| $\frac{1}{8}$ -inch..... | 6,948 | 150,190 |
| $\frac{1}{4}$ -inch..... | 84,683 | 2,366,324 |
| $\frac{3}{8}$ -inch..... | 3,303 | 113,678 |
| 1-inch..... | 5,463 | 197,441 |
| 1 $\frac{1}{4}$ -inch..... | 479 | 14,605 |
| 1 $\frac{1}{2}$ -inch..... | 1,492 | 46,134 |
| 2-inch..... | 2,076 | 65,525 |
| 2 $\frac{1}{2}$ -inch..... | 12 | 267 |
| 3-inch..... | 907 | 26,438 |
| 4-inch..... | 1,902 | 62,426 |
| 6-inch..... | 173 | 22,163 |
| 8-inch..... | 45 | 3,175 |
| 10-inch..... | 11 | 1,650 |
| 12-inch..... | 18 | 3,627 |
| 16-inch..... | 2 | 95 |
| Totals..... | 107,514 | 3,082,738 |

Table No. V.
Fountains in Service January 31, 1917.

| | Style B. | Style D. | Style G. | Style H. | Style I. | Style J. | Style K. | Style L. | Style M. | Totals. |
|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
| City proper..... | ... | ... | ... | 7 | 20 | 12 | .... | 7 | 9 | 55 |
| Roxbury..... | 2 | ... | ... | 4 | 2 | 6 | 3 | 1 | 1 | 19 |
| West Roxbury..... | ... | 1 | ... | ... | ... | 2 | 3 | 1 | 1 | 8 |
| Brighton..... | ... | ... | ... | 1 | ... | ... | 2 | 3 | ... | 6 |
| Dorchester..... | 2 | ... | 1 | 1 | ... | 2 | 1 | 1 | 3 | 11 |
| South Boston..... | 2 | ... | ... | 2 | 5 | 5 | 1 | 2 | 1 | 18 |
| East Boston..... | 3 | ... | ... | 5 | ... | 3 | ... | 1 | ... | 12 |
| Charlestown..... | 3 | ... | ... | ... | 11 | 6 | ... | 1 | 2 | 23 |
| Hyde Park..... | 1 | ... | ... | 1 | ... | 1 | ... | ... | 2 | 5 |
| Totals..... | 13 | 1 | 1 | 21 | 38 | 37 | 10 | 17 | 19 | 157 |

FOUNTAIN DESCRIPTION.

- B. Indicates fountain for beasts only. Continuous flow of water during year.
D. Indicates fountain for man and beast. Automatic fixtures for both.
G. Indicates fountain for man and beast. Hygienic bubble fixtures for man. Continuous flow of water for man and beast all the year.
H. Indicates fountain for man only. Water of ordinary temperature. Hygienic bubble fixtures controlled by self-closing cocks. In service during warm weather.
I. Indicates taps on water posts, hydrants and fountains for watering horses.
J. Indicates fountains for man only. Cold water. Hygienic bubble fixtures controlled by self-closing cocks. In service during warm weather.
K. Indicates fountain for man and beast, fitted with automatic fixtures controlled by self-closing cock. Bubble fixture for man in warm weather. Continuous flow for beasts all the year.
L. Indicates fountain for man and beast, bubble fixtures for man and taps fitted for the purpose of filling pails to water horses, continuous flow for beasts all the year.
M. Indicates fountain for beasts only, fitted with taps for the purpose of filling pails to water horses. Continuous flow for beasts all the year.

Table No. VI.
Maintenance of Main Pipe.

| NATURE OF WORK. | Number of Jobs. | Total Cost. |
|---|--------------------|-------------|
| Gate boxes renewed..... | 541 | \$7,307 33 |
| Gates located, inspected (oiled, tested, etc.)..... | 2,679 | 626 58 |
| Repaving (including contractor's miscellaneous jobs)..... | 172 | 1,014 47 |
| Leaking joints repaired..... | 129 | 1,745 11 |
| Gate boxes cleaned out..... | 120 | 227 34 |
| Gate boxes raised and lowered..... | 316 | 780 87 |
| Gates salted..... | 6,766 | 822 66 |
| Repairs on bridges (on pipes, boxes, etc.)..... | 8 | 180 85 |
| Dead ends blown off..... | 240 | 398 57 |
| Gate locations marked..... | 10,789 | 1,472 48 |
| Gates repaired, etc..... | 18 | 122 35 |
| Gates leaking at packing..... | 51 | 179 52 |
| Box tops renewed..... | 74 | 479 27 |
| Work caused by contractors, corporations and other services.... | 8 | 428 49 |
| Leaks due to settlement and other causes..... | 29 | 6,077 77 |
| Gates renewed..... | 8 | 392 10 |
| Opening and shutting gates..... | 11 | 44 38 |
| Gate box covers (37) and frames (9) replaced..... | 46 | 157 22 |
| Rotten gate boxes located and inspected..... | 496 | 158 70 |
| Miscellaneous jobs..... | 17 | 140 20 |
| Totals..... | 22,518 | \$22,756 26 |

Table No. VII.
Hydrants Established and Abandoned.

| | ESTABLISHED. | | | | | | ABANDONED. | | | | | |
|----------------------------|--------------|---------------|--------------|----------------|---------------|---------|------------|---------------|--------------|---------------|----------------|---------|
| | Lowry. | Boston Lowry. | Boston Post. | Ordinary Post. | Chapman Post. | Totals. | Lowry. | Boston Lowry. | Boston Post. | Chapman Post. | Ordinary Post. | Totals. |
| City proper..... | 2 | 1 | 2 | 32 | ... | 37 | 18 | .... | 11 | ... | 5 | 4 38 |
| Roxbury..... | 2 | ... | 2 | 32 | ... | 36 | 2 | 1 | 10 | ... | 8 | ... 21 |
| West Roxbury..... | 1 | 2 | 1 | 73 | ... | 77 | ... | 7 | 7 | ... | 14 | ... 28 |
| Brighton..... | 1 | 1 | 4 | 21 | ... | 27 | ... | 3 | 1 | ... | 2 | 1 7 |
| Dorchester..... | 9 | 3 | 5 | 63 | ... | 80 | 4 | 13 | 9 | ... | 2 | ... 28 |
| South Boston..... | 4 | 1 | ... | 12 | ... | 17 | 1 | ... | 8 | ... | 5 | ... 14 |
| East Boston..... | 1 | ... | 1 | 21 | ... | 23 | 2 | ... | 12 | ... | 3 | ... 17 |
| Charlestown (private)..... | ... | ... | ... | 1 | ... | 1 | 1 | ... | ... | ... | ... | ... 1 |
| Charlestown..... | ... | ... | 1 | 4 | ... | 5 | 3 | 1 | 1 | ... | 1 | ... 6 |
| Hyde Park..... | ... | 1 | ... | 31 | 1 | 33 | ... | 1 | ... | 4 | 1 | ... 6 |
| Total public..... | 20 | 9 | 16 | 289 | 1 | 335 | 30 | 26 | 59 | 4 | 41 | 5 165 |
| Total private..... | ... | ... | ... | 1 | ... | 1 | 1 | ... | ... | ... | ... | ... 1 |

Table No. VIII.
Hydrant Repairs.

| KIND OF WORK AND CAUSES. | Number of Jobs. | Cost. |
|--|-----------------|-------------|
| Boxes raised, lowered, reset, repaired, renewed and pumped out.. | 1,432 | \$13,147 86 |
| Barrels changed, relocated, reset and repaired..... | 313 | 2,247 70 |
| Hydrants thawed..... | 69 | 155 94 |
| Hydrants painted..... | 832 | 117 21 |
| Repairs on account of contractors, corporations and other departments..... | 119 | 350 37 |
| Repaved on account of repairs..... | 250 | 1,139 95 |
| Heavy teaming..... | 169 | 959 46 |
| Hydrants inspected, oiled and cleaned..... | 59,022 | 7,320 36 |
| Number of sacks of salt delivered to Fire Department, 1,830..... | ..... | 1,464 00 |
| Totals..... | 62,206 | \$26,902 85 |

Table No. IX.
Statement of Service Pipes Laid and Abandoned.

| SIZES OF SERVICES LAID AND ABANDONED. | CITY PROPER. | | ROXBURY. | | WEST ROXBURY. | | BRIGHTON. | | DORCHESTER. | | SOUTH BOSTON. | | EAST BOSTON. | | CHARLES- TOWN. | | HYDE PARK. | | BOSTON HARBOR. | | TOTALS. | |
|--|------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|
| | Number of Services. | Length in Feet. | Number of Services. | Length in Feet. | Number of Services. | Length in Feet. | Number of Services. | Length in Feet. | Number of Services. | Length in Feet. | Number of Services. | Length in Feet. | Number of Services. | Length in Feet. | Number of Services. | Length in Feet. | Number of Services. | Length in Feet. | Number of Services. | Length in Feet. | Number of Services. | Length in Feet. |
| 1-inch laid. | 45 | 924 | 63 | 1,579 | 282 | 6,329 | 118 | 2,914 | 453 | 10,627 | 22 | 563 | 23 | 444 | 2 | 15 | 67 | 1,213 | 1,076 | 24,637 | 2 | 15 |
| 1-inch abandoned. | 90 | 1,864 | 31 | 919 | 8 | 118 | 5 | 118 | 19 | 199 | 9 | 250 | 6 | 133 | 2 | 44 | 1 | 34 | 172 | 3,730 | 1 | 172 |
| 2-inch laid. | 18 | 416 | 7 | 181 | 4 | 83 | 17 | 460 | 21 | 697 | 6 | 157 | 2 | 777 | 3 | 75 | 4 | 118 | 179 | 2,189 | 3 | 179 |
| 2-inch abandoned. | 4 | 195 | 3 | 49 | 1 | 30 | 3 | 102 | 1 | 18 | 1 | 30 | 1 | 33 | 2 | 62 | 1 | 18 | 12 | 373 | 1 | 12 |
| 3-inch laid. | 59 | 1,464 | 20 | 706 | 2 | 90 | 36 | 1,029 | 7 | 128 | 3 | 59 | 4 | 84 | 2 | 36 | 2 | 36 | 131 | 3,578 | 2 | 131 |
| 3-inch abandoned. | 12 | 311 | 4 | 128 | 2 | 188 | 4 | 185 | 2 | 67 | 2 | 84 | 1 | 84 | 1 | 38 | 33 | 787 | 51 | 1,456 | 2 | 51 |
| 4-inch laid. | 10 | 270 | 4 | 128 | 2 | 188 | 4 | 185 | 2 | 67 | 2 | 84 | 1 | 84 | 1 | 38 | 33 | 787 | 22 | 656 | 2 | 22 |
| 4-inch abandoned. | 16 | 443 | 1 | 37 | 2 | 49 | 1 | 110 | 1 | 150 | 6 | 192 | 1 | 110 | 2 | 6 | 2 | 200 | 29 | 869 | 2 | 29 |
| 5-inch laid. | 4 | 97 | 4 | 122 | 1 | 49 | 1 | 110 | 3 | 38 | 1 | 192 | 24 | 88 | 2 | 4 | 1 | 161 | 2 | 260 | 1 | 2 |
| 5-inch abandoned. | 17 | 530 | 4 | 122 | 1 | 49 | 3 | 40 | 4 | 192 | 4 | 82 | 3 | 88 | 2 | 4 | 1 | 161 | 6 | 161 | 1 | 6 |
| 6-inch laid. | 1 | 22 | 2 | 19 | 1 | 110 | 3 | 40 | 4 | 192 | 4 | 82 | 3 | 88 | 2 | 4 | 1 | 161 | 37 | 1,058 | 1 | 37 |
| 6-inch abandoned. | 5 | 121 | 2 | 19 | 1 | 110 | 3 | 40 | 4 | 192 | 4 | 82 | 3 | 88 | 2 | 4 | 1 | 161 | 12 | 228 | 1 | 12 |
| 7-inch laid. | 2 | 38 | 2 | 19 | 1 | 110 | 3 | 40 | 4 | 192 | 4 | 82 | 3 | 88 | 2 | 4 | 1 | 161 | 3 | 60 | 3 | 3 |
| 7-inch abandoned. | 211 | 3,971 | 20 | 482 | 4 | 90 | 4 | 90 | 6 | 63 | 20 | 415 | 2 | 84 | 2 | 54 | 2 | 33 | 267 | 5,192 | 2 | 267 |
| 8-inch laid. | 7 | 152 | 1 | 197 | 1 | 69 | 1 | 69 | 2 | 49 | 2 | 49 | 1 | 69 | 1 | 13 | 1 | 24 | 8 | 176 | 1 | 8 |
| 8-inch abandoned. | 2 | 90 | 1 | 197 | 1 | 69 | 1 | 69 | 2 | 49 | 2 | 49 | 1 | 69 | 1 | 13 | 1 | 24 | 6 | 405 | 1 | 6 |
| 9-inch laid. | 2 | 117 | 1 | 197 | 1 | 69 | 1 | 69 | 2 | 49 | 2 | 49 | 1 | 69 | 1 | 13 | 1 | 24 | 3 | 130 | 1 | 3 |
| 9-inch abandoned. | 1 | 56 | 1 | 197 | 1 | 69 | 1 | 69 | 2 | 49 | 2 | 49 | 1 | 69 | 1 | 13 | 1 | 24 | 1 | 223 | 1 | 1 |
| 10-inch laid. | 1 | 56 | 1 | 197 | 1 | 69 | 1 | 69 | 2 | 49 | 2 | 49 | 1 | 69 | 1 | 13 | 1 | 24 | 1 | 223 | 1 | 1 |
| 10-inch abandoned. | 1 | 56 | 1 | 197 | 1 | 69 | 1 | 69 | 2 | 49 | 2 | 49 | 1 | 69 | 1 | 13 | 1 | 24 | 1 | 223 | 1 | 1 |
| 11-inch laid. | 1 | 56 | 1 | 197 | 1 | 69 | 1 | 69 | 2 | 49 | 2 | 49 | 1 | 69 | 1 | 13 | 1 | 24 | 1 | 223 | 1 | 1 |
| 11-inch abandoned. | 1 | 56 | 1 | 197 | 1 | 69 | 1 | 69 | 2 | 49 | 2 | 49 | 1 | 69 | 1 | 13 | 1 | 24 | 1 | 223 | 1 | 1 |
| 12-inch laid. | 1 | 56 | 1 | 197 | 1 | 69 | 1 | 69 | 2 | 49 | 2 | 49 | 1 | 69 | 1 | 13 | 1 | 24 | 1 | 223 | 1 | 1 |
| 12-inch abandoned. | 1 | 56 | 1 | 197 | 1 | 69 | 1 | 69 | 2 | 49 | 2 | 49 | 1 | 69 | 1 | 13 | 1 | 24 | 1 | 223 | 1 | 1 |
| Total laid. | 386 | 8,406 | 122 | 3,451 | 200 | 6,551 | 184 | 4,807 | 497 | 11,829 | 96 | 1,553 | 31 | 916 | 12 | 218 | 75 | 1,406 | 1,693 | 39,221 | 1 | 1,693 |
| Total abandoned. | 120 | 2,690 | 34 | 908 | 11 | 336 | 6 | 228 | 23 | 445 | 14 | 410 | 7 | 169 | 6 | 128 | 36 | 863 | 257 | 6,243 | 1 | 257 |
| Net increase. | 266 | 5,707 | 88 | 2,483 | 270 | 6,215 | 178 | 4,579 | 474 | 11,384 | 82 | 1,143 | 24 | 750 | 6 | 90 | 39 | 537 | 1,406 | 32,978 | 1 | 1,406 |

Table No. X.
Cost of New Service Pipes Laid.

| Size. | Number. | Length in Feet. | Material. | Labor, Teaming, etc. | Repaving. | Blasting. | Total Cost. | Average Cost per Service. | Average Cost per Linear Foot. |
|-------------|---------|--------------------|-------------|----------------------------|------------|-----------|----------------|---------------------------------|--|
| 1-inch... | 804 | 19,417 | \$8,844 80 | \$10,567 27 | \$876 49 | \$705 00 | \$20,993 56 | \$26 11 | \$1 08 |
| 1-inch... | 59 | 1,593 | 961 74 | 858 06 | 56 61 | ..... | 1,876 41 | 31 80 | 1 18 |
| 1-inch... | 80 | 2,260 | 1,700 48 | 1,172 11 | 23 84 | ..... | 2,896 43 | 36 21 | 1 28 |
| 1½-inch... | 7 | 289 | 182 96 | 143 92 | ..... | ..... | 326 88 | 46 70 | 1 13 |
| 1½-inch... | 7 | 338 | 234 55 | 142 36 | 8 88 | ..... | 385 79 | 55 11 | 1 14 |
| 2-inch... | 13 | 430 | 662 40 | 195 31 | ..... | ..... | 857 71 | 65 98 | 1 99 |
| 3-inch... | 5 | 89 | 258 85 | 170 78 | 65 54 | ..... | 495 17 | 99 03 | 5 56 |
| 4-inch... | 252 | 4,880 | 13,055 34 | 10,707 91 | 2,413 06 | 144 00 | 26,320 31 | 104 44 | 5 39 |
| 6-inch... | 4 | 356 | 273 88 | 234 47 | 24 70 | ..... | 533 05 | 133 26 | 1 50 |
| 8-inch... | 2 | 90 | 193 53 | 96 12 | ..... | ..... | 289 65 | 144 83 | 3 22 |
| 10-inch*... | 1 | 223 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | 1,234 | 29,965 | \$26,368 53 | \$24,288 31 | \$3,469 12 | \$849 00 | \$54,974 96 | | |
| 1-inch†... | 12 | 120 | 33 56 | 63 50 | 6 85 | 19 50 | 123 41 | | |
| 1-inch†... | 4 | 57 | 21 72 | 24 81 | ..... | ..... | 46 53 | | |
| 1-inch‡... | 1 | 8 | 1 53 | 6 72 | ..... | ..... | 8 25 | | |
| Totals... | 1,234 | 30,150 | \$26,425 34 | \$24,383 34 | \$3,475 97 | \$868 50 | \$55,153 15 | | |

* This 10-inch pipe was a main that was changed into a service for the Metropolitan Coal Company at East Boston.

† These services were formerly laid to vacant lots, and have been previously counted in the number of services laid.

‡ These are existing services where the pipe was extended to connect with new mains in street, etc.

Table No. XI.
Cost of Service Pipes Abandoned and Plugged.

| Size. | Number. | Length in Feet. | Material. | Labor, Teaming, etc. | Repaving. | Total Cost. | Credit (Stock Returned). | Net Total Cost. | Average Cost per Service. | Average Cost per Linear Foot. |
|--------------|---------|--------------------|-----------|----------------------------|-----------|----------------|-----------------------------|-----------------|------------------------------|----------------------------------|
| 1-inch..... | 47 | 1,075 | \$12 17 | \$310 75 | \$15 00 | \$337 92 | \$91 74 | \$246 18 | \$5 24 | \$0 23 |
| 1-inch..... | 5 | 71 | 1 56 | 28 24 | 3 66 | 33 46 | 14 28 | 19 18 | 3 83 | 27 |
| 1½-inch..... | 1 | 150 | 38 | 1 59 | ..... | 1 97 | 1 96 | 01 | ..... | ..... |
| 2-inch..... | 1 | 22 | 1 45 | 17 50 | ..... | 18 95 | 17 42 | 1 53 | 1 53 | 07 |
| 3-inch..... | 3 | 60 | 9 98 | 54 49 | ..... | 64 47 | 15 01 | 49 46 | 16 48 | 82 |
| 4-inch..... | 2 | 55 | 10 03 | 47 04 | 16 04 | 73 11 | 1 38 | 71 73 | 35 86 | 1 30 |
| Totals.... | 59 | 1,433 | \$35 57 | \$459 61 | \$34 70 | \$529 88 | \$141 79 | \$388 09 | | |

Table No. XII.

Cost of Laying New Services, Excavating and Backfilling Done by Applicant.

| Size. | Number. | Length in Feet. | Material. | Labor. | Teaming. | Total Cost. | Average Cost per Service. | Average Cost per Linear Foot. |
|-----------------|---------|--------------------|------------|----------|----------|----------------|---------------------------------|--|
| 1/4-inch..... | 199 | 3,957 | \$1,913 11 | \$281 71 | \$223 27 | \$2,418 09 | \$12 15 | \$0 61 |
| 1/2-inch..... | 9 | 293 | 133 59 | 16 02 | 11 76 | 161 37 | 17 93 | 55 |
| 1-inch..... | 8 | 181 | 138 30 | 20 42 | 7 95 | 166 67 | 20 83 | 92 |
| 1 1/4-inch..... | 4 | 102 | 98 09 | 13 24 | 7 23 | 118 56 | 29 64 | 1 16 |
| 1 1/2-inch..... | 14 | 227 | 291 18 | 38 84 | 15 39 | 345 41 | 24 67 | 1 52 |
| 2-inch..... | 7 | 89 | 150 34 | 17 53 | 7 92 | 175 79 | 25 11 | 1 95 |
| 3-inch..... | 2 | 26 | 94 69 | 22 75 | 3 18 | 120 62 | 60 31 | 4 64 |
| 4-inch..... | 11 | 277 | 563 64 | 101 39 | 19 51 | 684 54 | 62 32 | 2 47 |
| 6-inch..... | 2 | 49 | 142 49 | 70 01 | 4 61 | 217 11 | 108 55 | 4 43 |
| 12-inch..... | 1 | 56 | 160 05 | ..... | 2 22 | 162 27 | 162 27 | 2 90 |
| Totals..... | 257 | 5,257 | \$3,685 48 | \$581 91 | \$303 04 | \$4,570 43 | | |

Table No. XIII.

Cost of Service Pipes, Replacing Others.

| Size. | LAID. | | ABANDONED AND PLUGGED. | | Material. | Labor, Teaming, etc. | Repaving. | Blasting. | Total Cost. | Average Cost per Service. | Average Cost per Linear Foot. |
|-----------------|---------|--------------------|------------------------------|--------------------|------------|-------------------------|-----------|-----------|-------------|------------------------------|----------------------------------|
| | Number. | Length in Feet. | Number. | Length in Feet. | | | | | | | |
| 1/4-inch..... | ..... | ..... | 2 | 15 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1/2-inch..... | 72 | 1,135 | 125 | 2,655 | \$528 46 | \$709 17 | \$6 06 | \$27 50 | \$1,271 19 | \$17 66 | \$1 12 |
| 1-inch..... | 11 | 246 | 12 | 373 | 108 64 | 132 23 | 13 13 | ..... | 254 00 | 23 09 | 1 03 |
| 1-inch..... | 43 | 1,137 | 46 | 1,385 | 609 82 | 705 90 | 211 64 | ..... | 1,527 36 | 35 52 | 1 34 |
| 1 1/4-inch..... | 10 | 265 | 1 | 110 | 201 07 | 202 11 | 13 27 | ..... | 416 45 | 41 64 | 1 57 |
| 1 1/2-inch..... | 9 | 304 | 6 | 151 | 292 17 | 199 98 | 37 78 | ..... | 529 93 | 58 88 | 1 74 |
| 2-inch..... | 17 | 539 | ..... | ..... | 737 54 | 541 14 | 117 68 | ..... | 1,396 36 | 82 14 | 2 59 |
| 3-inch..... | 5 | 113 | ..... | ..... | 224 15 | 189 28 | ..... | ..... | 413 43 | 82 69 | 3 66 |
| 4-inch..... | 4 | 35 | 6 | 121 | 152 54 | 182 08 | 5 06 | ..... | 339 68 | 84 92 | 9 17 |
| 8-inch..... | 1 | 40 | ..... | ..... | 89 80 | 98 65 | ..... | ..... | 188 45 | 188 45 | 4 17 |
| Totals..... | 172 | 3,814 | 198 | 4,810 | \$2,944 19 | \$2,960 54 | \$404 62 | \$27 50 | \$6,336 85 | | |

Table No. XIV.
Service Pipe Repairs.

| CAUSES. | Number of Jobs. | Cost. |
|---|--------------------|-------------|
| Boxes established, repaired, regulated and renewed..... | 147 | \$593 36 |
| Cooks repaired and regulated..... | 75 | 653 49 |
| Church cooks replaced with sidewalk cooks..... | 84 | 359 58 |
| Sidewalk cooks established..... | 12 | 103 88 |
| Gates defective..... | 5 | 163 35 |
| Eaten by electrolysis and ashes and gnawed by rats..... | 19 | 346 58 |
| Defective pipes..... | 785 | 10,006 05 |
| Pipes regulated..... | 6 | 51 09 |
| Repairs on account of contractors, corporations and other de- partments..... | 497 | 2,225 30 |
| Frost..... | 27 | 575 69 |
| Heavy teaming..... | 36 | 248 03 |
| Repaved on account of repairs..... | 365 | 2,237 79 |
| Rust, dirt and fish..... | 673 | 2,809 32 |
| Uprights established, renewed, repaired, relocated, regulated and oiled..... | 3,833 | 1,637 41 |
| Letting on and shutting off water..... | 8,818 | 11,151 52 |
| Investigations..... | 821 | 2,756 29 |
| Totals..... | 16,203 | \$35,918 73 |

Table No. XV.

Fountains Changed, 1916.

| ESTABLISHED. | ABANDONED. |
|--------------------------------------|--------------------------------------|
| <i>Style.</i> | <i>Style.</i> |
| J. Hyde square. | K. Hydesquare. |
| J. Dudley street at Dunmore street. | J. Dudley street, at Dunmore street. |
| M. Adams street, at Neponset avenue. | B. Adams street, at Neponset avenue. |
| M. Eliot square. | B. Eliot square. |
| J. 1661 Blue Hill avenue. | H. 1661 Blue Hill avenue. |
| M. Blue Hill avenue, at Grove Hall. | H. Blue Hill avenue, at Grove Hall. |
| L. Oak square. | L. Oak square. |
| M. Haymarket square. | B. Haymarket square. |

New Fountains Established During Year 1916.

| |
|---|
| <i>Style.</i> |
| L. Post Office square. |
| J. Washington street at Grove street, West Roxbury. |

Abandoned During Year 1916.

| |
|---|
| <i>Style.</i> |
| J. North End Park Beach. |
| J. Forest Hills square. |
| B. Washington street at River street, Dorchester. |
| H. Fourth street at Dorchester street. |

For fountain description, see Table No. V.

Cost of Establishing and Abandoning Fountains.

| NUMBER. | Material. | Labor and Teaming. | Cost. |
|----------------------|-----------|--------------------|----------|
| Two established..... | \$209 91 | \$209 88 | \$419 79 |
| Four abandoned..... | | | |

Table No. XVI.*Fountain Repairs, 1916.*

| CAUSE. | Number of Jobs. | Cost. |
|---------------------------------------|-----------------|------------|
| Hit by team | 39 | \$263 71 |
| Fountain service pipe leaking | 114 | 647 95 |
| Putting lanterns on trench jobs | 15 | 54 06 |
| Drain full of dirt | 59 | 314 07 |
| Handles broken | 14 | 41 01 |
| Shut off and let on for season | 65 | 84 88 |
| Cocks broken | 44 | 182 59 |
| Fountains frozen | 5 | 25 60 |
| Repaired ice box | 5 | 26 86 |
| Attached cocks to post hydrants | 47 | 129 30 |
| Change locations | 1 | 7 99 |
| Reconstructed | 1 | 126 33 |
| Put in new grating | 2 | 7 75 |
| Bad paving | 3 | 9 48 |
| Totals | 414 | \$1,921 67 |

Table No. XVII.*Water Posts Established and Abandoned, 1916.*

| ESTABLISHED. | ABANDONED. |
|----------------------------------|---|
| Milk street, at Atlantic avenue. | Central street, at Atlantic avenue. |
| Dorchester avenue, at D street. | Commonwealth avenue, at Hereford street. |
| | Commonwealth avenue, at Fairfield street. |

| NUMBER. | Material. | Labor and Teaming. | Total Cost. |
|-----------------------|-----------|--------------------|-------------|
| Two established | \$8 49 | \$12 18 | \$30 67 |
| Three abandoned | | | |

Table No. XVIII.

Water Post Repairs.

| CAUSES. | Number of Jobs. | Cost. |
|---------------------------------|-----------------|----------|
| Decayed boxes..... | 8 | \$129 26 |
| Valves leaking..... | 17 | 53 53 |
| Shut off and let on..... | 50 | 57 02 |
| Hit by team..... | 9 | 33 20 |
| Boxes above grade..... | 3 | 9 64 |
| Car sprinkler cover broken..... | 1 | 5 31 |
| Bad paving..... | 5 | 20 23 |
| Posts leaking at base..... | 6 | 10 98 |
| Totals..... | 99 | \$319 17 |

Table No. XIX.

Meters Set for Meter Branch.

| NUMBER SET. | | Size. | Cost of Material. | Cost of Labor, Teaming and Car Fare. | Total. |
|-------------|---------|---------|-------------------|--------------------------------------|------------|
| Outside. | Inside. | | | | |
| 36..... | ..... | 1-inch | \$192 57 | \$177 36 | \$371 93 |
| | 102 | 1-inch | 7 91 | 175 87 | 183 78 |
| 5..... | ..... | 1-inch | 28 31 | 29 50 | 57 81 |
| | 1 | 1-inch | ..... | 88 | 88 |
| 2..... | ..... | 1-inch | 19 42 | ..... | 19 42 |
| | 1 | 1-inch | 5 74 | 17 19 | 22 93 |
| 2..... | ..... | 1½-inch | 18 25 | 14 79 | 33 04 |
| 1..... | ..... | 1½-inch | ..... | 2 63 | 2 63 |
| 6..... | ..... | 2-inch | 52 23 | 23 53 | 75 76 |
| 1..... | ..... | 3-inch | 10 62 | 17 44 | 28 06 |
| 2..... | ..... | 4-inch | 18 18 | 37 09 | 55 27 |
| 1..... | ..... | 6-inch | 15 44 | 8 07 | 23 51 |
| | 1 | 6-inch | 34 54 | 3 21 | 37 75 |
| 56 | 105 | ..... | \$403 21 | \$509 56 | * \$912 77 |

* Above exclusive of cost of meters.

Table No. XX.
Meter Repairs for Meter Branch, 1916.

| CAUSES. | Number of Jobs. | Cost. |
|--|--------------------|-------------------|
| Meters leaking | 94 | \$251 67 |
| Decayed boxes | 220 | 2,611 97 |
| Put to grade | 44 | 171 79 |
| Frozen | 14 | 24 88 |
| Repair and reset frames and covers | 35 | 114 22 |
| Bad paving | 109 | 520 30 |
| Meters changed and relocated | 61 | 199 40 |
| Abandoned box | 1 | 3 37 |
| No force | 1 | 14 61 |
| Totals | 590 | \$3,939 80 |

Table No. XXI.
Machine Shop.
Stock Manufactured from the Rough.

| KIND. | Number. | Labor. | 48 per Cent Added. | Stock. | Cost Each. | Total Cost. |
|------------------------------------|---------|---------|--------------------------|---------|---------------|----------------|
| Ordinary post hydrant, No. 2 | 225 | \$10 71 | \$15 85 | \$23 28 | \$39 13 | \$8,904 25 |
| 3-inch blow-off hydrants | 13 | 7 13 | 10 55 | 8 58 | 19 13 | 248 69 |
| 4-inch gates | 175 | 5 74 | 8 49 | 7 37 | 15 86 | 2,775 50 |
| 6-inch gates | 105 | 7 48 | 11 06 | 13 74 | 24 80 | 2,604 00 |
| 8-inch gates | 97 | 8 69 | 12 85 | 20 88 | 33 73 | 3,271 81 |
| 10-inch gates | 49 | 12 62 | 18 67 | 31 04 | 49 71 | 2,435 79 |
| 12-inch gates | 108 | 14 40 | 21 30 | 40 08 | 61 38 | 6,629 04 |
| 16-inch gates | 2 | 28 62 | 42 35 | 51 44 | 93 79 | 187 58 |
| 1-inch sidewalk cocks | 1,885 | 60 | 89 | 96 | 1 85 | 3,467 25 |
| 1-inch sidewalk cocks | 50 | 72 | 1 07 | 1 16 | 2 23 | 111 50 |
| 1-inch sidewalk cocks | 128 | 84 | 1 24 | 86 | 2 10 | 268 89 |
| 1-inch corporation cocks | 1,852 | 44 | 65 | 35 | 1 00 | 1,852 00 |
| 1-inch corporation cocks | 62 | 58 | 86 | 54 | 1 40 | 86 80 |
| 1-inch corporation cocks | 65 | 69 | 1 02 | 96 | 1 98 | 128 70 |
| 1½-inch corporation cocks | 25 | 85 | 1 26 | 1 45 | 2 71 | 67 75 |
| 1½-inch corporation cocks | 154 | 1 06 | 1 57 | 1 90 | 3 47 | 534 38 |

Machine Shop.—Continued.*Stock Manufactured from the Rough.—Concluded.*

| KIND. | Number. | Labor. | 48 per Cent Added. | Stock. | Cost Each. | Total Cost. |
|---|---------|--------|--------------------------|--------|---------------|--------------------|
| $\frac{1}{4}$ -inch combination coupling..... | 32 | \$0 16 | \$0 24 | \$0 25 | \$0 49 | \$15 68 |
| 1 $\frac{1}{4}$ -inch combination coupling..... | 25 | 26 | 38 | 78 | 1 16 | 29 00 |
| 2-inch combination coupling..... | 25 | 28 | 41 | 1 09 | 1 50 | 37 50 |
| $\frac{1}{4}$ -inch coupling nuts..... | 1,877 | 02 | 03 | 05 | 08 | 150 16 |
| $\frac{1}{4}$ -inch coupling nuts..... | 200 | 04 | 06 | 09 | 15 | 30 00 |
| 1-inch coupling nuts..... | 200 | 05 | 07 | 15 | 22 | 44 00 |
| 1 $\frac{1}{4}$ -inch coupling nuts..... | 102 | 09 | 13 | 31 | 44 | 44 88 |
| $\frac{1}{4}$ -inch coupling nuts..... | 115 | 02 | 03 | 04 | 07 | 8 05 |
| $\frac{1}{4}$ -inch coupling tubes..... | 6,068 | 02 | 03 | 04 | 07 | 424 76 |
| $\frac{1}{4}$ -inch coupling tubes..... | 416 | 04 | 06 | 08 | 14 | 58 24 |
| 1-inch coupling tubes..... | 165 | 05 | 07 | 12 | 19 | 31 35 |
| 2-inch air cocks..... | 37 | 2 45 | 3 63 | 5 66 | 9 27 | 342 99 |
| $\frac{1}{4}$ -inch male couplings..... | 776 | 03 | 04 | 10 | 14 | 108 64 |
| 2-inch male couplings..... | 10 | 16 | 24 | 60 | 84 | 8 40 |
| 1-inch solder nipples..... | 47 | 07 | 10 | 15 | 25 | 11 75 |
| $\frac{1}{4}$ -inch bent couplings..... | 194 | 08 | 12 | 32 | 44 | 85 36 |
| 1-inch bent couplings..... | 50 | 17 | 25 | 52 | 77 | 38 50 |
| 1 $\frac{1}{4}$ -inch bent couplings..... | 36 | 24 | 36 | 1 07 | 1 43 | 51 48 |
| Hydrant wastes..... | 271 | 22 | 33 | 27 | 60 | 162 60 |
| 1-inch meter bushings..... | 50 | 09 | 13 | 24 | 37 | 18 50 |
| Installing bushings in sidewalk uprights... | 2,518 | 04 | 06 | 47 | 53 | 1,334 54 |
| 4-inch jointer..... | 7 | 14 | 21 | 95 | 1 16 | 8 12 |
| 12-inch jointer..... | 2 | 35 | 52 | 1 58 | 2 10 | 4 20 |
| | | | | | | \$36,542 54 |

Table No. XXII.
Machine Shop.— Continued.
Stock Repaired.

| | Number. | Total Cost. |
|--|---------|-------------|
| 4-inch gate..... | 4 | \$8 52 |
| 6-inch gate..... | 27 | 49 13 |
| 8-inch gate..... | 6 | 34 90 |
| 12-inch gate..... | 12 | 47 58 |
| 16-inch gate..... | 2 | 20 13 |
| 4-inch Smith gates..... | 2 | 3 61 |
| 3-inch B. O. hydrants..... | 1 | 1 02 |
| Lowry hydrants..... | 62 | 329 09 |
| Boston Lowry hydrants..... | 17 | 55 95 |
| Boston post hydrants..... | 27 | 174 83 |
| Batchelder hydrants..... | 15 | 102 77 |
| Ordinary post hydrants..... | 37 | 158 19 |
| Meters repaired (various makes)..... | 124 | 115 85 |
| ½-inch coupling nuts (service pipe stock)..... | 270 | 7 86 |
| Total..... | | \$1,110 03 |

Table No. XXIII.
Machine Shop.— Concluded.
Miscellaneous Work.

| | Number. | Total Cost. |
|---|---------|-------------|
| Made face plates..... | 3 | \$111 07 |
| Made 4½-inch cap taps for hydrants..... | 2 | 43 98 |
| Made taps for 12-inch gate..... | 2 | 34 08 |
| Put steel coverings on posts in wagon shed (710 Albany street) .. | | 31 52 |
| Consigning stock to junk (labor only)..... | | 30 72 |
| Made tape cleaning machine..... | 1 | 29 35 |
| Repaired gears for Sanitary Service..... | 2 | 6 13 |
| Repaired drilling machine box..... | 1 | 4 34 |
| Accommodation work for High Pressure Service..... | | 2 09 |
| Repaired tool house for Brighton yard..... | 1 | 2 88 |
| Total..... | | \$296 16 |

Table No. XXIV.

Blacksmith Shop.

| | |
|---|-------------------|
| Repaired 2,519 tools | \$992 50 |
| Sharpened 5,506 picks, 860 bars and 1,666 chisels | 911 48 |
| Made 140 new tools | 154 63 |
| Repaired fence, East Boston yard | 14 79 |
| Repaired 8 wagons, buggies, etc. | 10 48 |
| Repaired fence, East Boston Reservoir | 4 50 |
| Repaired stall in stable, 710 Albany street | 1 96 |
| Total | \$2,090 34 |

Table No. XXV.

Carpenter Shop.

Stock Manufactured.

| | Number. | Total Cost. |
|--|-----------|-------------------|
| Boston hydrant boxes at \$4.77..... | 21 | \$100 17 |
| Deacon meter boxes at \$5.43..... | 10 | 54 30 |
| Large gate boxes at \$5.43..... | 30 | 162 90 |
| Lowry hydrant boxes at \$5.10..... | 66 | 336 60 |
| Meter boxes at \$4.97..... | 109 | 541 73 |
| Post hydrant boxes at \$5.65..... | 42 | 237 30 |
| Small gate boxes at \$4.32..... | 432 | 1,866 24 |
| Boston Lowry hydrant boxes at \$6.95..... | 38½ | 267 57 |
| Tops for Boston hydrant boxes at \$0.66..... | 6 | 3 96 |
| Tops for large gate boxes at \$0.66..... | 39 | 25 74 |
| Tops for Lowry hydrant boxes at \$0.77..... | 30 | 23 10 |
| Tops for post hydrant boxes at \$0.77..... | 36 | 27 72 |
| Tops for small gate boxes at \$0.60..... | 108 | 64 80 |
| Ground meter boxes at \$0.50..... | 275 | 137 50 |
| Pieces for raising Boston hydrant boxes at \$0.08 per inch..... | 90 in. | 7 20 |
| Pieces for raising large gate boxes at \$0.08 per inch..... | 550 in. | 44 00 |
| Pieces for raising Lowry hydrant boxes at \$0.08 per inch..... | 2,171 in. | 173 68 |
| Pieces for raising meter boxes at \$0.08 per inch..... | 1,289 in. | 103 12 |
| Pieces for raising small gate boxes at \$0.08 per inch..... | 4,454 in. | 356 32 |
| Wedges for main pipe work and concrete boxes..... | 2,806 | 40 00 |
| Plugs for main pipe work..... | 11 | 35 17 |
| Made 2,227 brackets and 4,281 shelves for meter department... | 6,508 | 204 06 |
| Made 52 wooden horses..... | 52 | 46 15 |
| Made 2-inch plugs for storeroom..... | 60 | 4 57 |
| Made stakes (3 feet 6 inches long) for marking gate locations... | 51 | 7 03 |
| Total..... | | \$4,870 93 |

Table No. XXVI.

Carpenter Shop.

Miscellaneous.

| | |
|---|-------------------|
| Fitting up top floor for new storeroom, 710 Albany street . . . | \$1,081 06 |
| Repairs in Dorchester yard on stables, buildings, etc. . . | 1,028 96 |
| Fitting up a modern shop for Dorchester yard . . . | 1,020 03 |
| Altered wagon shed for a garage, Dorchester yard . . . | 853 52 |
| Repaired 314 tools . . . | 287 14 |
| Repairs in Charlestown yard on stables, buildings, etc. . . | 242 06 |
| Repairs in stables and wagon sheds, 710 Albany street . . . | 210 61 |
| Repairs in storeroom, 710 Albany street . . . | 192 49 |
| Repaired wagon scales in yard, 710 Albany street . . . | 184 32 |
| Repairs in Brighton yard on stables, buildings, etc. . . | 184 20 |
| Repairs in West Roxbury yard on stables, buildings, etc. . . | 149 40 |
| Made 89 new tools . . . | 131 60 |
| Repairs in East Boston yard on stables, buildings, etc. . . | 72 51 |
| Work done for engineering branch . . . | 64 49 |
| Repairs in machine shop, 710 Albany street . . . | 61 24 |
| General repairs at Albany street yard . . . | 51 45 |
| Work done for meter branch, 710 Albany street . . . | 42 61 |
| Work done for income office, City Hall Annex . . . | 42 43 |
| Repairs in office, etc., 710 Albany street . . . | 36 78 |
| Made and set 4 new reservoir covers . . . | 23 22 |
| Nine wagon repairs . . . | 12 35 |
| Repaired ice fountain forms . . . | 12 00 |
| Repairs in pattern shop, 710 Albany street . . . | 8 66 |
| Accommodation work for High Pressure Service . . . | 8 65 |
| Repairs in plumbing shop, 710 Albany street . . . | 4 35 |
| Miscellaneous work . . . | 37 69 |
| Total . . . | <u>\$6,043 82</u> |

Table No. XXVII.

Pattern Shop.

| | |
|----------------------------------|-------------------|
| Repaired 76 patterns . . . | \$1,269 73 |
| Made 39 new patterns . . . | 934 80 |
| Shellacking small patterns . . . | 20 63 |
| Total . . . | <u>\$2,225 16</u> |

Table No. XXVIII.

Plumbing Shop.

| | |
|--|-------------------|
| Installing heating plant, etc., at Dorchester yard . . . | \$427 67 |
| Miscellaneous repairs and work at Dorchester yard . . . | 310 51 |
| Installed hot water heater and boiler at West Roxbury yard, . . . | 241 80 |
| Made 18 new tools . . . | 147 63 |
| Installed sink in new storeroom, 710 Albany street . . . | 74 28 |
| Miscellaneous repairs in yard, shops and office, 710 Albany street . . . | 63 28 |
| Repaired 16 tools . . . | 42 92 |
| Soldered 37 new air cocks . . . | 20 61 |
| Repaired 5 pumps . . . | 8 64 |
| Miscellaneous work on fountains . . . | 19 09 |
| Total . . . | <u>\$1,356 43</u> |

Table No. XXIX.

Miscellaneous.

| | |
|--|-------------------|
| Eighteen hundred and twenty-one inspections of patch paving | \$1,573 55 |
| Electrical and other repair work done in Dorchester yard | 683 01 |
| Flushing streets for Street Cleaning Service | 575 38 |
| Repairs in, cleaning snow, electrical and miscellaneous work, East Boston district | 501 96 |
| Removal of snow (accommodation work) | 415 41 |
| Wiring building at 710 Albany street (labor only, job not completed) | 387 90 |
| Delivering water to contractors, corporations and other services | 316 59 |
| Piling 30-inch pipe at Albany street yard | 223 11 |
| Setting new post hydrant at Mystic Wharf, Charlestown | 219 18 |
| Repair work done (caused by High Pressure Service) | 194 41 |
| General repairs (electrical, painting, etc.), 710 Albany street, | 165 62 |
| Work on mains on account of contractor's work (blasting, etc.) | 129 23 |
| Deacon meter boxes removed (8) | 106 65 |
| Repairs on sidewalk, 710 Albany street | 96 32 |
| Wiring new store room, 710 Albany street | 94 74 |
| Electrical and other accommodation work done for Paving Service | 81 45 |
| Removing concrete and brick wall, West Roxbury water tower, Mt. Bellevue | 78 22 |
| Repaired scale walls at 710 Albany street | 76 35 |
| Electrician repaired 4 gasoline pumps | 66 69 |
| Repaired Ludlow hydrant for Port Directors | 63 53 |
| Pumping out cellars on 4 locations | 32 27 |
| Abandoned one reservoir gate, Dock square and Friend street, | 16 33 |
| General work around Brighton yard | 11 79 |
| Repaired electric heater for South End sewer yard | 3 54 |
| Miscellaneous work | 79 71 |
| Total | <u>\$6,192 94</u> |

Cost of Extension of Main Pipe.

| Street. | Location. | District | Size. (Inch.) | Feet. | Cost. | Remarks. |
|------------------------------|--|---------------|------------------|-------|------------|-------------------------------------|
| Sprague place | From Sprague street..... | Hyde Park. | 4 | 27 | \$45 30 | Private, unconstructed. |
| Cowper street..... | Rice and Wadsworth streets | East Boston. | 6 | 61 | 184 38 | Private, unconstructed. |
| Mascot street | Ballou avenue and Norfolk street | Dorchester. | 6 | 106 | 281 35 | Private, unconstructed. |
| Archdale road | North side from Washington street | West Roxbury. | 6 | 25 | 82 89 | Private, unconstructed. |
| Archdale road | From Washington street..... | West Roxbury. | 6 | 363 | 427 51 | Private, unconstructed. |
| Commonwealth avenue..... | Opposite 1091..... | Brighton. | 6 | 22 | 77 27 | Public, macadam. |
| Lorraine terrace | From Warren street..... | Brighton. | 6 | 157 | 485 61 | Private, unconstructed. |
| Tibbetts Town way | South Eden and Mills streets | Charlestown. | 6 | 113 | 124 08 | Public, granite block, gravel base. |
| Washington-street place..... | From Washington street..... | Hyde Park. | 6 | 113 | 114 31 | Private, unconstructed. |
| | Totals | | 6 | 960 | \$1,837 40 | |
| Charles River place | From Charles street..... | City Proper. | 8 | 117 | \$650 62 | Private, unconstructed. |
| Edinboro' street..... | Essex and Beach streets | City Proper. | 8 | 280 | 782 62 | Public, asphalt. |
| Hudson street..... | From Beach street..... | City Proper. | 8 | 140 | 531 10 | Public, granite block. |
| Lincoln street..... | Tufta and Beach streets | City Proper. | 8 | 314 | 706 71 | Public, granite block, gravel base. |
| Province court | From Province street..... | City Proper. | 8 | 33 | 111 73 | Public, granite block. |
| South street..... | Beach and Tufta streets | City Proper. | 8 | 170 | 735 85 | Granite block, gravel base. |
| South street..... | Beach and Kneeland streets | City Proper. | 8 | 148 | 231 79 | Public, granite block, gravel base. |
| Tyler street..... | From Beach street..... | City Proper. | 8 | 138 | 283 87 | Public, asphalt. |
| West Hill place | Charles Street and Charles River Embankment. | City Proper. | 8 | 191 | 551 40 | Private, unconstructed. |

| | | | | | | |
|------------------------|---|--------------|-------|-----|-------------|------------------------------------|
| Lillian street..... | From Baywater street..... | East Boston. | 8 | 18 | 41 47 | Public, unconstructed. |
| Binney street..... | From Longwood avenue..... | Roxbury. | 8 | 191 | 462 34 | Private, unconstructed. |
| Cedric street..... | Magazine and Langdon streets..... | Roxbury. | 8 | 522 | 831 30 | Public, unconstructed. |
| Clapp street..... | From Norfolk avenue..... | Roxbury. | 8 | 175 | 538 57 | Public, unconstructed. |
| Hubert street..... | Westminster street and Shawmut avenue..... | Roxbury | 8 | 102 | 206 43 | Public, unconstructed. |
| Randall street..... | Harrison avenue and Fellows street..... | Roxbury. | 8 | 310 | 359 89 | Public, macadam. |
| St Mary's street..... | Medfield street and railroad..... | Roxbury. | 8 | 230 | 688 66 | Private, unconstructed. |
| Westminster road..... | Walnut park and Westminster avenue..... | Roxbury. | 8 | 353 | 909 01 | Public, under construction. |
| Arbutus street..... | Lucerne and Irma streets..... | Dorchester. | 8 | 244 | 393 86 | Private, unconstructed (rock). |
| Bispham street..... | From Park street..... | Dorchester. | 8 | 66 | 329 44 | Public, macadam. |
| Brunswick street..... | From Normandy street..... | Dorchester. | 8 | 28 | 60 46 | Public, under construction. |
| Caspian way..... | Castle Rock street and Savin Hill avenue..... | Dorchester. | 8 | 210 | 793 45 | Public, under construction (rock). |
| Chelmsford street..... | Adams and Charlemont streets..... | Dorchester. | 8 | 196 | 309 49 | Private, unconstructed. |
| Collins street..... | From Blue Hill avenue..... | Dorchester. | 8 | 350 | 1,095 20 | Private, unconstructed (rock). |
| Courtland street..... | From Harvard street..... | Dorchester. | 8 | 24 | 86 99 | Private, unconstructed. |
| Courtland street..... | From Morton street..... | Dorchester. | 8 | 178 | 449 33 | Private, unconstructed. |
| Crowell street..... | Norfolk avenue and Evans street..... | Dorchester. | 8 | 643 | 1,118 21 | Private, unconstructed. |
| Elmdale street..... | From Adams street..... | Dorchester. | 8 | 66 | 254 83 | Private, unconstructed. |
| Estella street..... | From Harvard street..... | Dorchester. | 8 | 23 | 85 02 | Private, unconstructed. |
| Estella street..... | Harvard and Morton streets..... | Dorchester. | 8 | 408 | 1,462 70 | Private, unconstructed (rock). |
| Foss road..... | Beaumont and Elm streets..... | Dorchester. | 8 | 435 | 803 68 | Private, unconstructed. |
| Carried forward..... | | | 6,303 | | \$15,866 02 | |

Cost of Extension of Main Pipe.—Continued.

| Street. | Location. | District. | Size. (Inch.) | Feet. | Cost. | Remarks. |
|-----------------------|---|-------------|------------------|-------|-------------|--------------------------------|
| | <i>Brought forward.</i> | | | 6,303 | \$15,866 02 | |
| Grant place..... | From Washington street..... | Dorchester. | 8 | 387 | 649 27 | Private, unconstructed (rock). |
| Greenwood street..... | Fowler and Elmo streets..... | Dorchester. | 8 | 186 | 436 66 | Public, macadam. |
| Harvest terrace..... | From Harvest street..... | Dorchester. | 8 | 159 | 297 28 | Private, gravel surface. |
| Harwood street..... | Willowwood and Lucerne streets..... | Dorchester. | 8 | 365 | 723 92 | Private, unconstructed (rock). |
| Levant street..... | From Geneva avenue..... | Dorchester. | 8 | 54 | 172 68 | Private, unconstructed. |
| Levant street..... | From Geneva avenue..... | Dorchester. | 8 | 98 | 263 40 | Public unconstructed. |
| Lithgow street..... | Talbot avenue and Wainwright street..... | Dorchester. | 8 | 543 | 904 40 | Public, unconstructed. |
| Menton street..... | From Standard street..... | Dorchester. | 8 | 238 | 482 69 | Private, unconstructed. |
| Moody street..... | From Roanoke road..... | Dorchester. | 8 | 466 | 954 03 | Private, unconstructed (rock). |
| Mt. Ida road..... | From Marie street..... | Dorchester. | 8 | 78 | 95 51 | Private, unconstructed (rock). |
| Parker terrace..... | From Ashmont street..... | Dorchester. | 8 | 186 | 493 14 | Private, unconstructed. |
| Ripley road..... | Vassar and Harvard streets..... | Dorchester. | 8 | 301 | 639 05 | Public, under construction. |
| Rosemont road..... | Dorchester avenue and Florida street..... | Dorchester. | 8 | 783 | 1,359 63 | Public, unconstructed. |
| Sharp street..... | From Allston street..... | Dorchester. | 8 | 189 | 387 48 | Private, unconstructed. |
| Southwick street..... | Freeport and Sewell streets..... | Dorchester. | 8 | 178 | 516 56 | Public, unconstructed. |
| Sutton street..... | Woolson and Morton streets..... | Dorchester. | 8 | 381 | 967 82 | Private, unconstructed (rock). |
| Wilcox street..... | Beaumont street and Elm road..... | Dorchester. | 8 | 427 | 772 75 | Private, unconstructed. |
| Wildwood street..... | From Morton street..... | Dorchester. | 8 | 220 | 414 14 | Private, unconstructed. |

| | | | | | | |
|-----------------------------|------------------------------------|---------------|---|--------|-------------|---------------------------------|
| Acadia road..... | From Centre street..... | West Roxbury. | 8 | 307 | 642 87 | Private, unconstructed (rock.) |
| Blauvon road..... | Hyde Park avenue and railroad..... | West Roxbury. | 8 | 225 | 353 81 | Private, unconstructed. |
| Bruce street..... | From Ricker street..... | West Roxbury. | 8 | 223 | 473 01 | Private, unconstructed (rock.). |
| Byuner street..... | From Parkway..... | West Roxbury. | 8 | 157 | 268 19 | Public, macadam. |
| Carlford road..... | Hyde Park avenue and railroad..... | West Roxbury. | 8 | 225 | 453 95 | Private, unconstructed. |
| Cedarwood street..... | From Moss Hill road..... | West Roxbury. | 8 | 450 | 715 74 | Private, unconstructed. |
| Delford street..... | From Archdale road..... | West Roxbury. | 8 | 16 | 74 50 | Private, unconstructed. |
| Farquhar street..... | From Centre street..... | West Roxbury. | 8 | 399 | 710 31 | Private, unconstructed. |
| Gilmore terrace..... | From Park street..... | West Roxbury. | 8 | 220 | 439 28 | Private, unconstructed. |
| Greaton road..... | Schirmer road and Weld street..... | West Roxbury. | 8 | 202 | 471 35 | Private, unconstructed. |
| Haslett street..... | Pinehurst and Amherst streets..... | West Roxbury. | 8 | 233 | 454 03 | Public, tarvia macadam (rock.). |
| Hogdon terrace..... | From Maple street..... | West Roxbury. | 8 | 266 | 493 08 | Private, unconstructed. |
| Keystone street..... | From North avenue..... | West Roxbury. | 8 | 32 | 88 24 | Private, unconstructed. |
| Lasher street..... | Washington and South streets..... | West Roxbury. | 9 | 361 | 619 91 | Private, unconstructed. |
| Montvale street..... | From Belgrade street..... | West Roxbury. | 8 | 143 | 281 01 | Private, unconstructed. |
| Moody street..... | From Roanoke road..... | West Roxbury. | 8 | 95 | 178 47 | Private, unconstructed. |
| Nut street..... | From North avenue..... | West Roxbury. | 8 | 30 | 98 44 | Private, unconstructed. |
| Ricker street..... | Walker and Bruce streets..... | West Roxbury. | 8 | 232 | 453 25 | Private, unconstructed. |
| Seminole street..... | Tampa and Oakland streets..... | West Roxbury. | 8 | 399 | 742 70 | Private, unconstructed (rock.). |
| Stratford street..... | From Saville street..... | West Roxbury. | 8 | 43 | 105 99 | Public, macadam. |
| Theodore Parker road..... | From Schirmer road..... | West Roxbury. | 8 | 42 | 73 15 | Private, unconstructed. |
| <i>Carried forward.....</i> | | | | 15,842 | \$34,287 71 | |

Cost of Extension of Main Pipe.—Continued.

| STREET. | Location. | District. | Size. (Inch.) | Feet. | Cost. | Remarks. |
|------------------------------|--|---------------|------------------|--------|-------------|--------------------------------|
| <i>Brought forward</i> | | | | 15,842 | \$34,287 71 | |
| Toll Gate road | From Washington street | West Roxbury. | 8 | 24 | 84 05 | Private, unconstructed. |
| Willow street | Weld and Babcock streets | West Roxbury. | 8 | 102 | 350 61 | Private, unconstructed. |
| Winslow street | From Perham street | West Roxbury. | 8 | 21 | 74 53 | Public, under construction. |
| Wright street | From North avenue | West Roxbury. | 8 | 16 | 67 11 | Private, unconstructed. |
| Brayton road | Kendrick and Breck avenues | Brighton. | 8 | 875 | 1,376 47 | Private, unconstructed. |
| Buckminster street | From Commonwealth avenue | Brighton. | 8 | 242 | 498 77 | Private, unconstructed. |
| Crescent circuit | From Larch street | Brighton. | 8 | 637 | 1,032 68 | Private, unconstructed. |
| Crescent circuit | From Breck avenue | Brighton. | 8 | 45 | 109 63 | Private, unconstructed. |
| Cypress road | Glencoe and Etna streets | Brighton. | 8 | 119 | 274 33 | Private, unconstructed. |
| Dunboy street | Faneuil and Perthshire streets | Brighton. | 8 | 429 | 915 86 | Public, macadam. |
| Harriet street | Hobart and Madeline streets | Brighton. | 8 | 524 | 1,267 98 | Private, unconstructed. |
| Kilayth terrace | From Kilayth road | Brighton. | 8 | 315 | 722 60 | Private, unconstructed (rock). |
| Radcliffe road | At No. 17 | Brighton. | 8 | 23 | 96 23 | Private, unconstructed. |
| Waldo terrace | Washington and Henahaw streets | Brighton. | 8 | 130 | 352 07 | Public, unconstructed. |
| Gardner street | Main and Sever streets | Charlestown. | 8 | 176 | 439 85 | Public, macadam. |
| Agnes avenue | From River street | Hyde Park. | 8 | 174 | 321 42 | Private, unconstructed. |
| Bridge street | From Dana avenue | Hyde Park. | 8 | 271 | 583 78 | Public, macadam. |
| Easton avenue | From Dana avenue | Hyde Park. | 8 | 178 | 311 43 | Public, macadam. |

| | | | | | | |
|---------------------------|---|---------------|----|--------|-------------|---------------------------------------|
| Hebron street..... | From Roanoke road..... | Hyde Park. | 8 | 61 | 129 66 | Public, macadam. |
| Lakeside avenue..... | From Sprague street..... | Hyde Park. | 8 | 18 | 78 93 | Private, unconstructed. |
| Warren avenue..... | From Summit street..... | Hyde Park. | 8 | 350 | 628 64 | Private, unconstructed. |
| | Totals..... | | 8 | 20,572 | \$44,012 34 | |
| Fulton street..... | From Richmond street..... | City Proper. | 10 | 300 | 690 53 | Public, concrete base, granite block. |
| Fulton street..... | Clinton and Ferry streets..... | City Proper. | 10 | 464 | 1,260 92 | Public, gravel base granite block, |
| Otis street..... | Summer and Franklin streets..... | City Proper. | 10 | 250 | 718 18 | Public, concrete base, granite block. |
| Power House street..... | From K street..... | South Boston. | 10 | 215 | 477 53 | Private, unconstructed. |
| Baywater street..... | Washburn avenue and Lillian street..... | East Boston. | 10 | 317 | 772 96 | Public, unconstructed. |
| Beacon street..... | Brookline avenue and railroad..... | Roxbury. | 10 | 342 | 749 71 | Private, unconstructed. |
| Beacon street..... | Brookline avenue and railroad bridge..... | Roxbury. | 10 | 12 | 32 53 | Public, macadam. |
| Beacon street..... | Nos. 685 and 693..... | Roxbury. | 10 | 52 | 136 75 | Public, macadam. |
| Beacon street..... | Brookline avenue and railroad bridge..... | Roxbury. | 10 | 82 | 148 37 | Public, macadam. |
| Butler street..... | Brookline avenue and railroad..... | Roxbury. | 10 | 405 | 820 32 | Private, unconstructed. |
| Holworthy street..... | Humboldt avenue and Harold street..... | Roxbury. | 10 | 263 | 800 00 | Private, unconstructed. |
| Massachusetts avenue..... | Beacon and Back streets..... | Roxbury. | 10 | 186 | 506 73 | Public, asphalt. |
| Althea street..... | Whitten and Centre streets..... | Dorchester. | 10 | 334 | 824 04 | Public, unconstructed. |
| Delhi street..... | French and Oak Hill avenues..... | Dorchester. | 10 | 230 | 890 94 | Private, unconstructed (rock). |
| Dunbar avenue..... | From Moody street..... | Dorchester. | 10 | 246 | 758 33 | Private, macadam. |
| Franconia street..... | From Adams street..... | Dorchester. | 10 | 568 | 1,241 12 | Private, unconstructed. |
| | Carried forward..... | | | 4,266 | \$10,828 96 | |

Cost of Extension of Main Pipe.—Continued.

| STREET. | Location. | District. | Size. (Inch.) | Feet. | Cost. | Remarks. |
|-------------------|---------------------------------------|---------------|------------------|-------|-------------|--------------------------------|
| | <i>Brought forward.</i> | | | 4,286 | \$10,828 96 | |
| Franconia street. | From Charlemont street. | Dorchester. | 10 | 215 | 399 39 | Private, unconstructed. |
| Hall avenue. | From Washington street. | Dorchester. | 10 | 175 | 424 39 | Private, unconstructed (rock). |
| Lanark road. | From Marie street. | Dorchester. | 10 | 342 | 1,227 45 | Private, unconstructed (rock). |
| Leslie street. | Woolson and Morton streets. | Dorchester. | 10 | 834 | 1,738 66 | Private, unconstructed. |
| Lincoln road. | From Leslie street. | Dorchester. | 10 | 16 | 96 99 | Private, unconstructed. |
| Lucerne street. | Woodrow avenue and Willowwood street. | Dorchester. | 10 | 576 | 1,462 37 | Private, unconstructed (rock). |
| Marie street. | Lorna and Lanark roads. | Dorchester. | 10 | 229 | 504 42 | Private, unconstructed (rock). |
| Newcastle street. | From Savannah avenue. | Dorchester. | 10 | 239 | 913 91 | Private, unconstructed (rock). |
| Orlando street. | From Newcastle street. | Dorchester. | 10 | 342 | 849 17 | Private, unconstructed (rock). |
| Theodore street. | From Morton street. | Dorchester. | 10 | 344 | 717 75 | Public, under construction. |
| Verdun street. | Codman and Carruth streets. | Dorchester. | 10 | 611 | 1,321 20 | Private, unconstructed. |
| Whitten street. | Clematis street and end. | Dorchester. | 10 | 534 | 1,149 19 | Private, unconstructed. |
| Archdale road. | South side from Washington street. | West Roxbury. | 10 | 43 | 151 33 | Private, unconstructed. |
| Archdale road. | From Washington street. | West Roxbury. | 10 | 349 | 636 20 | Private, unconstructed. |
| Ashmore road. | From Hyde Park avenue. | West Roxbury. | 10 | 21 | 127 73 | Public, macadam. |
| Cottage avenue. | From Washington street. | West Roxbury. | 10 | 281 | 839 40 | Private, unconstructed (rock). |
| Dellmore road. | From Hyde Park avenue. | West Roxbury. | 10 | 22 | 114 45 | Private, unconstructed. |
| Elvin road. | From Washington street. | West Roxbury. | 10 | 275 | 651 59 | Private, unconstructed. |

| | | | | | | |
|------------------------------|--|---------------|----|--------|-------------|--|
| Firth road..... | Washington street and Stony brook..... | West Roxbury. | 10 | 490 | 902 92 | Private, unconstructed. |
| George street..... | From North avenue..... | West Roxbury. | 10 | 185 | 498 50 | Private, unconstructed (rook). |
| Hayden street..... | Nikisch avenue and Washington street..... | West Roxbury. | 10 | 368 | 774 48 | Private, unconstructed. |
| Hobson street..... | From Beech street..... | West Roxbury. | 10 | 461 | 912 47 | Private, unconstructed. |
| Orange street..... | Brook and West streets..... | West Roxbury. | 10 | 612 | 1,191 23 | Private, unconstructed. |
| Parkton road..... | From Parkway..... | West Roxbury. | 10 | 269 | 516 77 | Private, unconstructed. |
| Private way..... | Calford and Blanvon roads..... | West Roxbury. | 10 | 185 | 335 49 | Right of way granted to Public Works Department to lay and maintain pipe line; 3 feet strip. |
| Russett road..... | Schirmer and Pierpont roads..... | West Roxbury. | 10 | 249 | 498 25 | Private, unconstructed. |
| Saville street..... | Park and Stratford streets..... | West Roxbury. | 10 | 340 | 733 32 | Public, under construction. |
| Schirmer road..... | Theodore Parker and Greston streets..... | West Roxbury. | 10 | 472 | 1,023 60 | Private, unconstructed. |
| St. Rose street..... | From North Weld place..... | West Roxbury. | 10 | 200 | 373 91 | Public, under construction. |
| Washington street..... | Hinsdale road and Washington Heights avenue. | West Roxbury. | 10 | 1,450 | 3,875 06 | Public, Massachusetts Highway, pipe in gravel sidewalk (rook). |
| Mann road..... | From Washington street..... | West Roxbury. | 10 | 14 | 105 95 | Public, Massachusetts Highway, pipe in sidewalk. |
| West street..... | From Orange street..... | West Roxbury. | 10 | 161 | 472 74 | Private, unconstructed. |
| Wyvern street..... | Hyde Park avenue and Florence street..... | West Roxbury. | 10 | 472 | 1,265 21 | Private, unconstructed (rook). |
| Arlington street..... | From Faneuil street..... | Brighton. | 10 | 186 | 360 12 | Private, unconstructed. |
| Bostonia avenue..... | From Breck avenue..... | Brighton. | 10 | 47 | 145 31 | Private, unconstructed. |
| Colon street..... | From Warren street..... | Brighton. | 10 | 121 | 384 74 | Private, unconstructed. |
| Colonial street..... | Euston road and end of line..... | Brighton. | 10 | 88 | 247 51 | Public, macadam. |
| <i>Carried forward</i> | | | | 16,064 | \$38,742 13 | |

Cost of Extension of Main Pipe.—Continued.

| STREET. | Location. | District. | Size. (Inch.) | Feet. | Cost. | Remarks. |
|-------------------|--|--------------|------------------|--------|-------------|---------------------------------------|
| | <i>Brought forward.</i> | | | 16,054 | \$38,742 13 | |
| Glenco street. | Garden and Saybrook streets. | Brighton. | 10 | 317 | 631 49 | Public, under construction. |
| Hunnell avenue. | Burton and Matchett streets. | Brighton. | 10 | 335 | 604 00 | Private, unconstructed. |
| Nottingham road. | Nos. 55 and 59. | Brighton. | 10 | 51 | 82 98 | Private, unconstructed. |
| Penniman street. | From Braintree road. | Brighton. | 10 | 161 | 333 25 | Private, unconstructed. |
| Walbridge street. | Brainerd road and Commonwealth avenue. | Brighton. | 10 | 437 | 946 24 | Private, unconstructed. |
| Kennebec street. | Oakland street and Roanoke road. | Hyde Park. | 10 | 925 | 1,968 16 | Private, unconstructed. |
| Kennebec street. | From Roanoke road. | Hyde Park. | 10 | 16 | 41 03 | Public, macadam. |
| Roanoke road. | Kennebec and Wood avenues. | Hyde Park. | 10 | 352 | 776 62 | Private, unconstructed. |
| Upton road. | From Vernon street. | Hyde Park. | 10 | 158 | 567 13 | Private, unconstructed (rock). |
| Upton road. | From Border road. | Hyde Park. | 10 | 248 | 474 66 | Private, unconstructed. |
| Vernon street. | At Upton road. | Hyde Park. | 10 | 24 | 53 40 | Private, unconstructed. |
| | <i>Totals.</i> | | 10 | 19,128 | \$45,221 09 | |
| Albany street. | Across Kneeland street. | City Proper. | 12 | 65 | \$450 42 | Public, granite block. |
| Atlantic avenue. | Oliver and Broad streets. | City Proper. | 12 | 157 | 377 72 | Public, granite block, concrete base. |
| Atlantic avenue. | India and Milk streets. | City Proper. | 12 | 356 | 894 06 | Public, granite block, concrete base. |
| Canal street. | Causeway and Traverse streets. | City Proper. | 12 | 32 | 177 81 | Public, concrete base, granite block. |
| Causeway street. | Portland and Lancaster streets. | City Proper. | 12 | 178 | 753 62 | Public, concrete base, granite block. |

| | | | | | | |
|------------------------|--|---------------|-------|-------------|----------|---|
| Friend street..... | Washington and Sudbury streets..... | City Proper. | 12 | 317 | 862 63 | Public, gravel base, granite block. |
| Harrison avenue..... | Kneeland and Bennet streets..... | City Proper. | 12 | 308 | 924 89 | Public, granite block. |
| Harrison avenue..... | Bristol and Randolph streets..... | City Proper. | 12 | 573 | 1,609 89 | Public, brick sidewalk. |
| India street..... | Atlantic avenue and India square..... | City Proper. | 12 | 78 | 292 83 | Public, granite block, concrete base. |
| Lancaster street..... | From Causeway street..... | City Proper. | 12 | 189 | 740 73 | Public, concrete base, granite block. |
| Lehigh street..... | From Albany street..... | City Proper. | 12 | 170 | 527 15 | Public, concrete base, granite block. |
| Oneida street..... | Harrison avenue and Albany street..... | City Proper. | 12 | 545 | 1,368 93 | Public, asphalt. |
| Portland street..... | At Sudbury street..... | City Proper. | 12 | 27 | 115 36 | Public, gravel base, granite block. |
| Portland street..... | Traverse and Causeway streets..... | City Proper. | 12 | 61 | 146 42 | Public, concrete base, granite block. |
| Portland street..... | From Causeway street..... | City Proper. | 12 | 56 | 232 24 | Public, concrete base, granite block. |
| Purchase street..... | Oliver and Hartford streets..... | City Proper. | 12 | 15 | 43 54 | Public, granite block, concrete base. |
| Purchase street..... | Oliver and Hartford streets..... | City Proper. | 12 | 37 | 128 75 | Public, granite block, concrete base. |
| Sudbury street..... | Portland and Friend streets..... | City Proper. | 12 | 206 | 1,060 80 | Public, gravel base, granite block. |
| Union Park street..... | Extension..... | City Proper. | 12 | 59 | 323 20 | Public, gravel base, granite block. |
| Washington street..... | Laconia and Perry streets..... | City Proper. | 12 | 95 | 294 25 | Public, granite block, concrete base. |
| A street..... | Melcher and First streets..... | South Boston. | 12 | 23 | 92 84 | Public, gravel base, granite block. |
| Condor street..... | Glendon and Eagle streets..... | East Boston. | 12 | 369 | 960 05 | Public, under construction. |
| Condor street..... | From East Eagle street..... | East Boston. | 12 | 408 | 1,041 78 | Public, under construction. |
| Harrison avenue..... | Renfrew and Dudley streets..... | Roxbury. | 12 | 894 | 2,383 44 | Public, brick sidewalk. |
| Renfrew street..... | From Harrison avenue..... | Roxbury. | 12 | 97 | 233 47 | Public, brick sidewalk, uncon- structed. |
| Carried forward..... | | | 5,320 | \$16,043 87 | | |

Cost of Extension of Main Pipe.—Continued.

| STREET. | Location. | District. | Size. (Inch.) | Feet. | Cost. | Remarks. |
|-----------------------------|---|---------------|------------------|-------|-------------|------------------------------------|
| | <i>Brought forward.</i> | | | 5,320 | \$16,043 87 | |
| Tremont entrance to Fenway. | Huntington avenue and Ruggles street. | Roxbury. | 12 | 807 | 1,262 84 | Public, gravel sidewalk. |
| Burlington avenue. | From Brookline avenue. | Roxbury. | 12 | 86 | 267 46 | Public, unconstructed. |
| Wensley street. | Bickford and Bucknam streets. | Roxbury. | 12 | 296 | 584 84 | Public, unconstructed. |
| Charlemont street. | From Minot street. | Dorchester. | 12 | 687 | 1,439 46 | Private, unconstructed. |
| Freeland street. | From Standard street. | Dorchester. | 12 | 680 | 1,508 63 | Private, unconstructed (rock). |
| Harvard street. | Morton street and Deering road. | Dorchester. | 12 | 837 | 2,047 39 | Public, under construction (rock). |
| Harvest street. | Lucerne and Willowood streets. | Dorchester. | 12 | 682 | 2,166 47 | Private, unconstructed (rock). |
| Lucerne street. | From Morton street. | Dorchester. | 12 | 29 | 186 18 | Private, unconstructed. |
| Morton street. | At railroad bridge. | Dorchester. | 12 | 110 | 336 06 | Public, under construction. |
| Normandy street. | Devon and Intervale streets. | Dorchester. | 12 | 327 | 677 42 | Public, under construction. |
| Ogden street. | From Fairmount avenue. | Dorchester. | 12 | 119 | 321 37 | Private, unconstructed. |
| Auburn street. | Washington street and Rosindale avenue. | West Roxbury. | 12 | 266 | 608 65 | Private, unconstructed. |
| Baker street. | Centre and Elmwood streets. | West Roxbury. | 12 | 751 | 1,768 89 | Public, macadam (rock). |
| Castleton road. | Huntington avenue and parkway. | West Roxbury. | 12 | 88 | 327 66 | Public, macadam. |
| Centre street. | Fletcher and Farquhar streets. | West Roxbury. | 12 | 210 | 540 83 | Public, macadam. |
| Hyde Park avenue. | Dellmore and Ashmore roads. | West Roxbury. | 12 | 780 | 2,165 98 | Public, macadam. |
| Jamaicaway. | Perkins street and Parkton road. | West Roxbury. | 12 | 941 | 2,310 95 | Public, gravel walk. |
| La Grange street. | Lasell and Vermont streets. | West Roxbury. | 12 | 66 | 251 89 | Public, macadam. |

| | | | | | | |
|--|--|---------------|----|--------|-------------|------------------------------------|
| Lasell street..... | From La Grange street..... | West Roxbury. | 12 | 252 | 600 39 | Private, unconstructed. |
| North avenue..... | Centre and Elmwood streets..... | West Roxbury. | 12 | 935 | 2,019 06 | Private, unconstructed. |
| Parkway..... | Byrner street and Parkton road..... | West Roxbury. | 12 | 555 | 1,268 65 | Public, gravel sidewalk. |
| Stimson street..... | Washington and Centre street..... | West Roxbury. | 12 | 982 | 2,155 55 | Public, macadam. |
| Tarleton road..... | From Temple street..... | West Roxbury. | 12 | 20 | 50 20 | Public, unconstructed. |
| Temple street..... | Hillcrest and Ivory streets..... | West Roxbury. | 12 | 523 | 1,608 21 | Public, under construction (rock). |
| Washington street..... | South street and Elven road..... | West Roxbury. | 12 | 1,642 | 3,877 97 | Public, macadam. |
| Whipple avenue..... | From Washington street..... | West Roxbury. | 12 | 28 | 136 85 | Private, macadam. |
| Dana avenue..... | Bridge street and railroad bridge..... | Hyde Park. | 12 | 489 | 914 79 | Public, macadam. |
| Dana avenue..... | Railroad bridge and Water street..... | Hyde Park. | 12 | 87 | 278 01 | Public, macadam. |
| Dana avenue..... | Over railroad bridge..... | Hyde Park. | 12 | 121 | 747 57 | Public, macadam. |
| Metropolitan avenue..... | From Highland avenue..... | Hyde Park. | 12 | 213 | 594 70 | Public, macadam. |
| In New York, New Haven & Hartford Railroad. | Yard at Readville..... | Hyde Park. | 12 | 440 | 1,458 77 | Private property, pay rent. |
| Sprague street..... | Railroad bridge and Dedham line..... | Hyde Park. | 12 | 519 | 1,489 53 | Public, macadam. |
| Wood avenue..... | At Rosnoke road..... | Hyde Park. | 12 | 27 | 45 90 | Public, macadam. |
| | Totals..... | | 12 | 19,915 | \$52,052 99 | |
| Kneeland street..... | Hudson and Tyler streets..... | City Proper. | 16 | 97 | 588 74 | Public, granite block. |
| Cottage street..... | At Maverick street..... | East Boston. | 16 | 18 | 192 74 | Public, macadam. |
| Porter street..... | At Chelsea street..... | East Boston. | 16 | 32 | 183 16 | Public, macadam. |
| | Totals..... | | 16 | 147 | \$964 63 | |

Cost of Extension of Main Pipe.—Concluded.

| STREET. | Location. | District. | Size. (Inch.) | Feet. | Cost. | Remarks. |
|-------------------------|--|--------------|------------------|-------|-------------|-------------------------------------|
| Chelsea street..... | Brooks and Porter streets..... | East Boston. | 24 | 1,356 | | Public, macadam. |
| Porter street..... | Chelsea and Cottage streets..... | East Boston. | 24 | 1,149 | \$22,882 75 | Public, macadam. |
| Cottage street..... | Porter and Maverick streets..... | East Boston. | 24 | 1,193 | | Public macadam. |
| | Totals..... | | 24 | 3,698 | \$22,882 75 | |
| Broadway extension..... | Curve street and Harrison avenue..... | City Proper. | 30 | 196 | | Public, granite block, gravel base. |
| Curve street..... | Hudson street and Broadway..... | City Proper. | 30 | 182 | | Public, macadam. |
| Harrison avenue..... | Broadway and Noxnet street..... | City Proper. | 30 | 33 | \$25,680 94 | Public, granite block, gravel base. |
| Hudson street..... | Kneeland and Curve streets..... | City Proper. | 30 | 1,312 | | Public, granite block, gravel base. |
| Kneeland street..... | Atlantic avenue and Hudson street..... | City Proper. | 30 | 918 | | Public, granite block, gravel base. |
| | Totals..... | | 30 | 2,641 | \$25,680 94 | |

Cost of Replacement of Main Pipe.

| Street. | Location. | District. | Size. (Inch.) | Feet. | Cost. | Original Size. (Inch.) | Remarks. |
|------------------------|---|---------------|------------------|-------|------------|------------------------------|--------------------------------------|
| Haven street..... | Shawmut and Rutland streets..... | City Proper. | 6 | 355 | \$325 86 | * ½ | Public, macadam. |
| Wesleyan place..... | From Bromfield street..... | City Proper. | 6 | 125 | 628 76 | 4 | Private, granite block, gravel base. |
| Stanwood terrace..... | From Stanwood street..... | Dorchester. | 6 | 150 | 324 93 | 1 ½ | Public, unconstructed. |
| | Totals..... | ..... | 6 | 630 | \$1,479 55 | | |
| Harvard place..... | From Washington street..... | City Proper. | 8 | 105 | 799 58 | 4 | Public, granite block (gravel base). |
| Rollins street..... | Washington street and Harrison avenue. | City Proper. | 8 | 320 | 749 19 | 6 | Public, macadam, paved gutter. |
| Cedric street..... | Magazine and Langdon streets..... | Roxbury. | 8 | 163 | 164 66 | 6 | Public, macadam. |
| Dulworth street..... | From Northampton street..... | Roxbury. | 8 | 38 | 105 36 | 6 | Public, macadam. |
| Ingleside street..... | At Dacia street..... | Roxbury. | 8 | 25 | 40 75 | 6 | Public, macadam. |
| Bispham street..... | From Park street..... | Dorchester. | 8 | 56 | 118 93 | 3 | Private, unconstructed. |
| Woolson street..... | Sutton and Wildwood streets..... | Dorchester. | 8 | 171 | 732 58 | 8 | Public, macadam (rock). |
| Bartlett square..... | From Green street..... | West Roxbury. | 8 | 291 | 655 68 | 6 | Public, macadam. |
| Bardwell street..... | From Ballard street..... | West Roxbury. | 8 | 196 | 483 59 | 6 | Public, macadam. |
| Goldsmith street..... | Across Custer street..... | West Roxbury. | 8 | 37 | 119 07 | 6 | Public, macadam. |
| Kittredge street..... | Cornell street and Glendower road, | West Roxbury. | 8 | 143 | 337 00 | 8 | Public, macadam. |
| St. Joseph street..... | At Woodman street..... | West Roxbury. | 8 | 45 | 85 04 | 6 | Public, macadam. |
| Glenwood place..... | From Washington street..... | Hyde Park. | 8 | 402 | 537 81 | 2 | Private, unconstructed. |
| | Totals..... | ..... | 8 | 1,932 | \$4,859 24 | | |

* Lead.

Cost of Replacement of Main Pipe.— *Concluded.*

| STREET. | Location. | District. | Size. (Inch.) | Feet. | Cost. | Original Size. (Inch.) | Remarks. |
|-----------------------------|-------------------------------------|---------------|------------------|-------|-------------|------------------------------|---------------------------------------|
| Fruit street..... | At Charles street..... | City Proper. | 10 | 20 | 57 47 | 10 | Public, macadam. |
| North Centre street..... | Hanover and North streets..... | City Proper. | 10 | 388 | 1,267 81 | 6 | Public, granite block (gravel base). |
| Dacia street..... | Brookford and Dewey streets..... | Roxbury. | 10 | 664 | 1,237 74 | 6 and 8. | Public, under construction. |
| Watson street..... | Northampton and Camden streets, | Roxbury. | 10 | 394 | 959 43 | 6 and 8. | Public, macadam. |
| Alexander street..... | Bird and Dudley streets..... | Dorchester. | 10 | 521 | 1,103 24 | 6 | Public, under construction. |
| Westwood street..... | Richfield street and Wales place... | Dorchester. | 10 | 669 | 1,382 70 | 6 and 8. | Public, under construction. |
| Ballard street..... | Custer and Centre streets..... | West Roxbury. | 10 | 588 | 1,221 12 | 6 | Public, macadam. |
| Jamaica street..... | Woodman and St. Rose streets..... | West Roxbury. | 10 | 500 | 1,055 91 | 6 and 8. | Public, macadam. |
| St. Rose street..... | From Jamaica street..... | West Roxbury. | 10 | 592 | 1,061 05 | 6 | Public, macadam. |
| Woodman street..... | Custer and Jamaica streets..... | West Roxbury. | 10 | 506 | 912 98 | 6 | Public, macadam. |
| Commonwealth avenue.... | At Fordham road..... | Brighton. | 10 | 32 | 117 77 | 10 | Public, macadam. |
| Glenco street..... | Garden and Saybrook streets..... | Brighton.... | 10 | 41 | 155 44 | 8 | Public, under construction. |
| | Totals..... | | 10 | 4,915 | \$10,532 96 | | |
| Blackstone street..... | Clinton and North streets..... | City Proper. | 12 | 300 | 1,340 38 | 12 | Public, granite block, concrete base. |
| Clinton street..... | Blackstone and Commercial streets, | City Proper. | 12 | 192 | 1,040 93 | 12 | Public, granite block, concrete base. |
| Dorchester avenue..... | Fourth and Fifth streets..... | South Boston. | 12 | 294 | 528 28 | 12 | Public, granite block, gravel base. |
| Summer street extension.... | At Harbor street..... | South Boston. | 12 | 115 | 370 56 | 8 and 12. | Public, granite block, concrete base. |
| Neptune road..... | At Cottage street..... | East Boston. | 12 | 15 | 47 32 | 12 | Public, gravel. |

| | | | | | | | |
|--------------------------|--|---------------|----|-------|-------------|----------|------------------------------------|
| Neptune road..... | At Frankfort street..... | East Boston. | 12 | 22 | 75 89 | 12 | Public, gravel. |
| Burlington avenue..... | From Brookline avenue..... | Roxbury. | 12 | 343 | 849 56 | 4 | Public, macadam. |
| Commonwealth avenue..... | Massachusetts avenue and Charles- gate. | Roxbury. | 12 | 800 | 2,451 62 | 6 and 8. | Public, macadam. |
| Jersey street..... | Queensberry and Peterborough streets. | Roxbury. | 12 | 160 | 517 13 | 12 | Public, macadam. |
| Louis Prang street..... | At Tremont entrance..... | Roxbury. | 12 | 10 | 63 59 | 12 | Public, macadam. |
| Magazine street..... | At Cedar street..... | Roxbury. | 12 | 20 | 91 62 | 12 | Public, macadam. |
| Northampton street..... | Columbus avenue and Watson street. | Roxbury. | 12 | 367 | 851 74 | 6 | Public, macadam. |
| Dorchester avenue..... | At Rosemont road..... | Dorchester. | 12 | 11 | 94 26 | 12 | Public, macadam. |
| New England avenue..... | Norfolk and Southern avenues..... | Dorchester. | 12 | 59 | 119 10 | 12 | Public, macadam. |
| Centre street..... | South side of Baker street..... | West Roxbury. | 12 | 14 | 100 08 | 12 | Public, macadam. |
| Custer street..... | South and Centre streets..... | West Roxbury. | 12 | 1,047 | 2,506 42 | 6 | Public, macadam. |
| Hyde Park avenue..... | Opposite Dellmore road..... | West Roxbury. | 12 | 10 | 91 25 | 12 | Public, macadam. |
| Ivory street..... | Temple and Perham streets..... | West Roxbury. | 12 | 306 | 685 57 | 6 | Public, macadam. |
| Perham street..... | Ivory and Vermont streets..... | West Roxbury. | 12 | 1,747 | 3,740 97 | 6 | Public, under construction (rock). |
| Temple street..... | Hillcrest and Ivory streets..... | West Roxbury. | 12 | 100 | 265 78 | 8 | Public, under construction (rock). |
| Breck avenue..... | Washington and Brayton streets.. | Brighton. | 12 | 964 | 2,016 62 | 6-8-12 | Public, under construction. |
| Sprague street..... | Railroad bridge and Dedham line.. | Hyde Park. | 12 | 876 | 2,518 71 | 4-6-14 | Public, macadam. |
| | Totals..... | ..... | 12 | 7,772 | \$20,367 38 | | |

WATERWORKS STATISTICS—CITY OF BOSTON.

FOR THE FISCAL YEAR ENDING JANUARY 31, 1917.

CONSUMPTION.

| | |
|---|------------------------|
| Estimated population supplied | 762,700 |
| Total consumption for year 1916 | 29,411,320,800 gallons |
| Passed through meters for year 1916 | 14,904,646,100 gallons |
| Percentage of consumption metered | 50.7 |
| Daily average consumption for the year 1916 | 80,358,800 gallons |
| Gallons per day to each consumer | 105 gallons |

DISTRIBUTION.

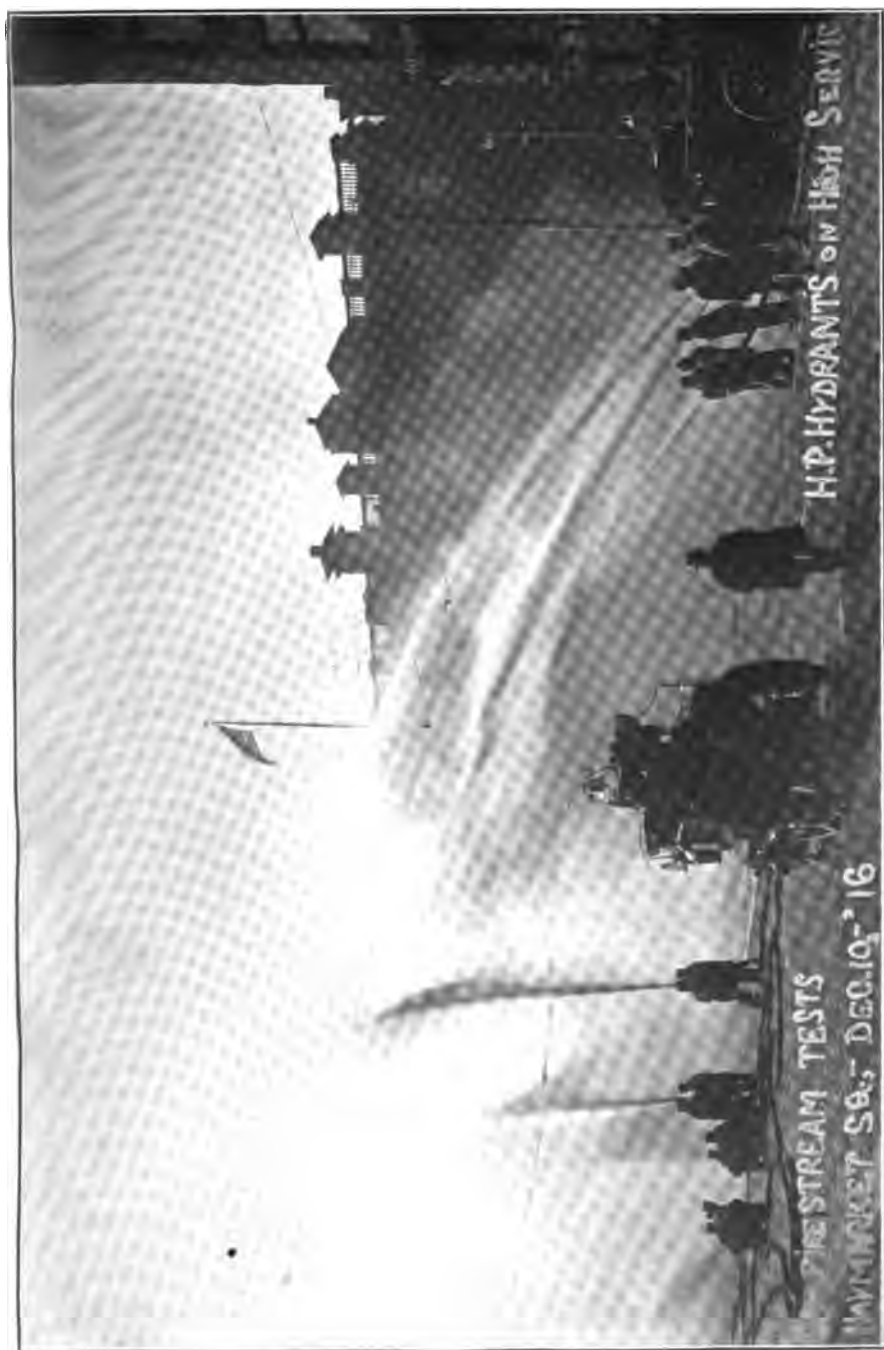
Mains.

Kind of pipe: Cast iron, wrought iron.
 Sizes: 2-inch to 48-inch.
 Extended, miles: 12.92.
 Sizes enlarged, miles: 2.79.
 Total miles now in use: 864.34.
 Public hydrants added: 170.
 Public hydrants now in use: 9,528.
 Stop gates added: 265.
 Stop gates now in use: 12,514.
 Stop gates smaller than 4 inches: 28.
 Number of blow-offs: 630.
 Range of pressure on mains: 30 to 90 pounds.

Services.

Kind of pipe and size: Lead and lead-lined, $\frac{1}{2}$ -inch to 2-inch; cast iron, 2 $\frac{1}{2}$ -inch to 12-inch; wrought iron and cement lined, $\frac{1}{2}$ -inch to 2-inch.
 Extended, feet: 32,978.
 Total miles now in use: 583.85.
 Service taps added: 1,406.
 Total service taps now in use: 107,514.
 Meters added: 7,144.
 Total meters now in use: 61,154.
 Percentage of services metered: 56.88.
 Motors and elevators in use: 606.
 Number of fire pipes connected to the system: 1,361.
 Standpipes for street watering: 540.
 Standpipes for street watering by electric cars: 12.
 Yearly revenue from annual water rates \$546,635 04
 Yearly revenue from metered water \$2,491,339 62
 Percentage of total revenue from metered water 82.1





H.P. HYDRANTS ON HIGH SERVICE

PIRESTREAM TESTS
MAYMARKET SQ., DEC. 19, '16

DIRECT LINES FROM HIGH PRESSURE HYDRANTS.
DOMESTIC HIGH SERVICE SUPPLY.



HIGH PRESSURE FIRE SERVICE.

PIPE LINES.

Excessive leakage conditions existing in the piping laid in 1914 and 1915 have been corrected by the contractors and by day labor forces of this service, so that, with the exception of two short sections, all the system is in fairly good condition. When the recorded leakage was reduced to four gallons per minute per lineal foot of joint, excavating was discontinued on that section, as this figure is the specified leakage in Manhattan piping system, where the trenches are backfilled before testing.

Test records of nine sections we found to have been recorded in our books by an employee of one of the contractors and as far as is known were not witnessed by an employee of this service. The records of these tests are among the smallest leakage rate of any, and it is intended the coming season to get tests conducted by the service of these sections.

Pipe laying continued during 1916 in the following streets: School street, from City Hall avenue to Washington; Broad street, from India square to Franklin street and up Franklin street to Oliver street; Purchase and Summer streets, from Congress street to South street; North street and Merchants row, from Blackstone street to Quincy Market, and included 1,163 lineal feet of 12-inch pipe with 6 valves; 1,280 feet of 16-inch pipe with 2 valves; 253 feet of 8-inch pipe with 16 valves and 16 hydrants, making a total of 2,696 lineal feet installed by Coleman Brothers on a unit price contract.

All sections of lines laid in 1916 were tested with the joints exposed, and as this was done on narrow and busy streets without serious complaint it has become an accepted policy intended to be carried out on all future pipe laying.

At the end of the season there were 188 hydrants out of a total of 192 ready for service from acceptable pipe lines, all connected up with the fireboat delivery at Central Wharf. Considering that the old fireboat high

pressure line, nearly a mile long and with 11 hydrants, installed in 1898, had been used in but one fire, a 16-inch connection with the high service distribution system was installed in Tremont street, near West street, and all hydrants are now available for fire purposes with direct hose streams or fire engines. A test of direct hose streams from the street, and into deck guns, at Haymarket square, was conducted December 3, in the presence of representatives of the National Board and Boston Board of Fire Underwriters, with very satisfactory results.

The state and city boards of health would not permit both the high service connection and that from the fireboat, so the latter was dismantled.

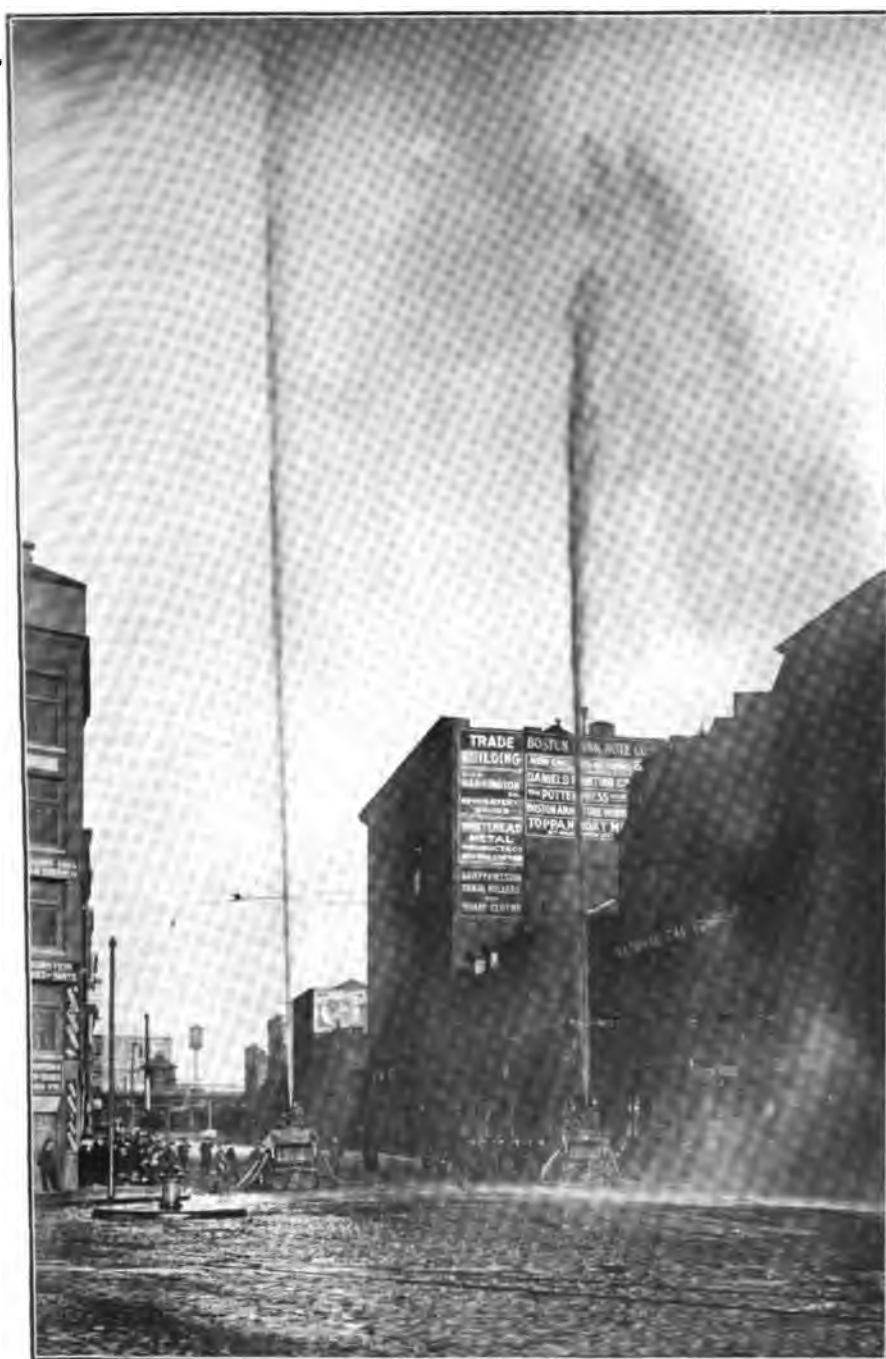
PUMPING STATION.

A legislative act, approved March 14, 1916, authorized the city to construct a pumping station in the Charles River Basin, on the Boston side, between the Cambridge Bridge and the Charles river dam, and authority was granted on June 8, 1916, by the War Department to construct the station in a location requested by the city, about opposite Fruit street.

For the size of station proposed at that time to erect this appeared to be the only available satisfactory location, but if a suitable area were reclaimed in the basin a building attractive enough in appearance to suit the location erected, and an equipment the same as that proposed for the original Charles street station installed, there would have been practically nothing left of the \$1,000,000 appropriated by the Legislature to construct the system, and for which the city would have a very large pumping station and only $6\frac{1}{2}$ miles of piping system, with no connection between the two.

Action by the Legislature in 1911 was urged by the Chamber of Commerce and the Finance Commission, and the latter body recommended on May 12, 1911, that after inspection and careful consideration of the plans prepared by City Engineer Jackson and the less expensive plan suggested by Fire Commissioner Wells, the City Council pass a vote accepting the act, provided it feels assured that the executive department will adopt a plan which will secure an adequate high pressure service for not more than the sum appropriated.

The Jackson plan proposed about $13\frac{1}{2}$ miles of pipe



LINES FROM HIGH PRESSURE HYDRANTS INTO HOSE WAGON GUNS.
DOMESTIC HIGH SERVICE SUPPLY.



mains with 319 hydrants, and the scheme proposed in connection with the large station comprised about 15 miles of pipe mains and 410 hydrants.

After a thorough investigation of the high pressure fire service in other cities, and the relationship of its service here to the city's general fire protection, the department reached a conclusion that a smaller station would fulfill any reasonable demand for the very restricted neighborhood it was proposed to protect at the expense of the entire city, and that it should be located to better advantage for power, hydraulic conditions, and future proposed extension of the piping system, close by the North End Park on Commercial street.

The department had in mind a smaller station than the one now contemplated (12,000 gallons per minute), but by coöperation with the Chamber of Commerce this size was agreed upon by both as suitable to erect at once, and in the location mentioned, and approval obtained from his Honor the Mayor.

It is thought that with the money available this station can be built and connected with the existing system with suitable feeders having necessary hydrants, and faith kept with the Legislature, the Mayor and City Council that a complete high pressure fire system be installed for the money now available.

To complete the piping system as intended, additional money could reasonably be requested from the next Legislature.

Financial Statement for Year Ending January 31, 1917.

| | | |
|--|-------------|--------------|
| Expended to January 31, 1916 | | \$591,897 97 |
| Expenditures during the fiscal year 1916-17: | | |
| Salaries and wages: | | |
| Engineers and assistants | \$16,230 65 | |
| Inspectors | 2,875 60 | |
| Foremen | 1,719 17 | |
| Clerks | 1,273 30 | |
| Mechanics | 1,067 52 | |
| Laborers | 381 94 | |
| Total pay roll | \$23,548 08 | |
| Construction of distribution system, | 20,601 76 | |
| Water pipes and castings | 9,587 17 | |
| Improvements and repairs at yard, | 2,416 35 | |
| Paving, street repairs, etc. | 1,869 54 | |
| Carried forward | \$58,022 90 | \$591,897 97 |

| | | |
|--|-------------|---------------------|
| <i>Brought forward</i> | \$58,022 90 | \$591,897 97 |
| Tools and repairs | 1,207 40 | |
| Teaming, freight, etc. | 718 09 | |
| Engineer's supplies | 545 54 | |
| Rent of South Bay yard | 499 98 | |
| Borings, Charles River Basin | 366 82 | |
| Stationery | 333 16 | |
| Traveling expenses | 317 83 | |
| Lumber | 253 57 | |
| Printing | 175 73 | |
| Inspection of castings | 145 32 | |
| Telephones | 65 09 | |
| Furniture and furnishings | 54 22 | |
| Professional and expert services | 29 00 | |
| Advertising | 24 65 | |
| Postage | 24 50 | |
| Cement and sand | 18 15 | |
| Bricks | 18 00 | |
| Waterproof clothing | 11 72 | |
| Cracked stone and gravel | 10 73 | |
| Drain pipe | 7 99 | |
| Fuel | 7 00 | |
| Copies of license for pumping station | 2 00 | |
| Oil | 80 | |
| Electric lighting | 75 | |
| Automobile: | | |
| Tires, tubes, etc., | \$145 71 | |
| Gas, oils, etc. | 140 47 | |
| Repairs, supplies | 168 91 | |
| License | 2 00 | |
| | <hr/> | |
| | \$457 09 | |
| Less repairs and supplies by Water Service: | | |
| Tires, tubes | \$39 08 | |
| Gas, oils, etc. | 118 09 | |
| Repairs, supplies | 34 56 | |
| | <hr/> | |
| | 191 73 | |
| | <hr/> | |
| | 265 36 | |
| Expenditures 1916-17 | | 63,126 30 |
| Total expenditures to January 31, 1917 | | <hr/> \$655,024 27 |
| Unexpended balance January 31, 1917 | | \$204,975 73 |
| Plus | | 140,000 00 |
| | | <hr/> |
| | | <u>\$344,975 73</u> |

APPENDIX D.

REPORT OF THE BOSTON AND CAMBRIDGE
BRIDGE COMMISSION.

BOSTON, February 1, 1917.

HON. JAMES M. CURLEY,

Mayor of Boston:

SIR,—As commissioner for the City of Boston I respectfully submit herewith the annual report of the Boston and Cambridge Bridge Commission for the year ending January 31, 1917.

The commission is composed of two members, one appointed by the Mayor of the City of Boston and the other by the Mayor of the city of Cambridge, under provisions of chapter 467, Acts of 1898.

The commission has charge of the maintenance of the following-named bridges connecting the cities of Boston and Cambridge: Anderson, Brookline Street, Cambridge, Harvard, Prison Point, River Street and Western Avenue to Cambridge.

As there is no special appropriation made for the City of Boston's portion of the expenses of this commission, the same is taken from the appropriation for the Bridge and Ferry Division, Bridge Service. The amount expended during the fiscal year ending January 31, 1917, was \$18,945.39.

I take this opportunity to express to the Cambridge member of the commission, Francis J. Smith, my appreciation of his coöperation and assistance in conducting the business of the commission.

Tables are annexed showing the distribution of the expenditures for the year, also statements of the draw-openings.

The following is a brief statement of the work done on the different bridges during the year:

HARVARD BRIDGE.

The piers have been repaired and frequent repairs have been made on the roadways. The wood block and

Shuman pavement on the bridge are in poor condition and some form of pavement should be put down which is better suited to the needs of this bridge. On account of the heavy traffic and vibration the pavement now in use requires frequent renewal and almost constant repairs. The wear and tear on the bridge due to the heavy traffic becomes worse every year and something will have to be done in the near future to remedy this condition.

The fences have been damaged in several places by automobiles and will need extensive repairs during the coming year.

The piers, also, will need repairs in the near future.

BROOKLINE STREET BRIDGE.

The section of the bridge used by the Boston Elevated Railway has been redecked by that company. Some repairs have been made on the sidewalks. More repairs will be needed during the coming year.

PRISON POINT BRIDGE.

This bridge has been resheathed and will require extensive repairs during the coming year. The traffic over the bridge is very heavy, necessitating frequent repairs to keep it safe for travel.

CAMBRIDGE BRIDGE.

The pavement near the rails of the Elevated has been relaid and several of the heavy iron lamp-posts have been repaired. With the exception of some of the other lamp-posts the bridge is in good condition and will not require much attention during the coming year.

RIVER STREET AND WESTERN AVENUE BRIDGES.

The usual repairs to the roadway have been made during the year and the same attention will be needed during the coming year. Both are in fairly good condition but require frequent repairs on account of the heavy traffic.

Respectfully submitted,

E. F. MURPHY,

Commissioner for the City of Boston.

Expenditures for the Year 1916-17.
(Same being the City of Boston's Portion — Which is One Half — of the Total Expenditures.)

| | Administration. | Anderson Bridge. | Cambridge Street-River Street Bridge. | Cambridge Bridge. | Kearse Street-Brookline Street Bridge. | Harvard Bridge. | Prison Point Bridge. | Western Avenue Bridge to Cambridge. | Totals. |
|------------------------------------|-----------------|------------------|---------------------------------------|-------------------|--|-----------------|----------------------|-------------------------------------|-------------|
| Salaries..... | \$250 00 | ..... | *\$3,069 78 | \$1,569 09 | ..... | \$3,202 65 | \$3,205 39 | ..... | \$11,296 91 |
| Inspection..... | ..... | ..... | 132 00 | 12 00 | ..... | 108 00 | 160 00 | \$168 00 | 580 00 |
| Repairs, roadways..... | ..... | ..... | 222 41 | 4 43 | ..... | 480 72 | 435 60 | 278 22 | 1,421 38 |
| Repairs, piers and fences..... | ..... | ..... | ..... | ..... | ..... | 103 11 | 52 16 | 255 35 | 410 62 |
| Repairs, conduits..... | ..... | ..... | ..... | ..... | ..... | 50 38 | ..... | ..... | 50 38 |
| Repairs, machinery..... | ..... | ..... | ..... | ..... | ..... | 335 46 | ..... | ..... | 335 46 |
| Repairs, lamp-posts..... | ..... | ..... | ..... | 212 50 | ..... | ..... | ..... | ..... | 212 50 |
| Lumber..... | ..... | ..... | 62 90 | ..... | ..... | 340 36 | 395 98 | 109 56 | 908 80 |
| Light..... | ..... | \$303 88 | 25 64 | 1,567 13 | \$203 60 | 822 57 | 12 30 | 25 62 | 2,960 74 |
| Fuel..... | ..... | ..... | 13 58 | ..... | ..... | 29 20 | 24 02 | ..... | 66 80 |
| Tools, hardware and supplies..... | ..... | ..... | 44 56 | 21 33 | ..... | 116 87 | 33 96 | 12 79 | 229 51 |
| Sweeping and sanding bridge..... | ..... | 15 41 | ..... | 47 09 | 3 50 | 148 85 | ..... | ..... | 214 85 |
| Office expenses: | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Printing, postage, stationery..... | 32 68 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 32 68 |
| Telephone..... | 10 14 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 10 14 |
| Traveling expenses..... | 120 00 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 120 00 |
| Miscellaneous..... | ..... | ..... | ..... | ..... | ..... | 90 62 | 4 00 | ..... | 94 62 |
| Totals..... | \$412 82 | \$319 29 | \$3,570 87 | \$3,433 57 | \$207 10 | \$5,828 79 | \$4,323 41 | \$849 54 | \$18,945 39 |

* Includes expense of drawtenders' services at the Western Avenue Bridge.

Monthly Summary of Draw Openings, Boston and Cambridge Bridges, February 1, 1916, to January 31, 1917.

| | CAMBRIDGE STREET- RIVER STREET BRIDGE. | | | HARVARD BRIDGE. | | | PRISON POINT BRIDGE. | | | WESTERN AVENUE BRIDGE. | | |
|--------------------|---|----------|-----------|-----------------|------------|------------|----------------------|-----------|------------|------------------------|----------|-----------|
| | Vessels. | Cargoes. | Openings. | Vessels. | Cargoes. | Openings. | Vessels. | Cargoes. | Openings. | Vessels. | Cargoes. | Openings. |
| 1916. | | | | | | | | | | | | |
| February..... | | | | 9 | | 6 | 50 | 8 | 34 | | | |
| March..... | | | | 24 | 2 | 20 | 42 | 8 | 21 | | | |
| April..... | 5 | | 3 | 62 | 12 | 36 | 55 | 9 | 33 | 4 | | 2 |
| May..... | | | | 60 | 13 | 34 | 42 | 7 | 28 | | | |
| June..... | 14 | | 8 | 81 | 15 | 47 | 39 | 7 | 21 | 10 | | 4 |
| July..... | 6 | | 2 | 69 | 13 | 42 | 30 | 5 | 20 | 6 | | 2 |
| August..... | 2 | | 2 | 71 | 14 | 42 | 57 | 9 | 32 | 1 | | 1 |
| September..... | 2 | | 1 | 77 | 13 | 49 | 27 | 4 | 14 | | | |
| October..... | 5 | | 4 | 70 | 14 | 41 | 50 | 9 | 31 | 5 | | 4 |
| November..... | | | | 57 | 11 | 36 | 36 | 6 | 23 | | | |
| December..... | | | | 113 | 14 | 74 | 52 | 9 | 32 | | | |
| 1917. | | | | | | | | | | | | |
| January..... | | | | 18 | 1 | 16 | 49 | 8 | 30 | | | |
| Totals..... | 34 | | 20 | 711 | 122 | 443 | 529 | 89 | 319 | 26 | | 13 |

Annual Summary of Draw Openings, February 1, 1916, to January 31, 1917.

| BARGE. | TUGS. | | | BARGES. | | | ALL OTHERS. | | | TOTAL VESSELS. | | | CARGOES. | OPENINGS. |
|------------------------------------|-------|--------|--------|---------|--------|--------|-------------|--------|--------|----------------|--------|--------|----------|-----------|
| | Day. | Night. | Total. | Day. | Night. | Total. | Day. | Night. | Total. | Day. | Night. | Total. | | |
| Cambridge Street-River Street..... | 10 | 2 | 12 | ..... | ..... | ..... | 21 | 1 | 22 | 31 | 3 | 34 | ..... | 20 |
| Harvard..... | 454 | 1 | 455 | 255 | ..... | 255 | 1 | ..... | 1 | 710 | 1 | 711 | 122 | 443 |
| Prison Point..... | 328 | 21 | 349 | 97 | 4 | 101 | 70 | 8 | 79 | 495 | 34 | 529 | 89 | 319 |
| Western Avenue to Cambridge..... | 8 | 2 | 10 | ..... | ..... | ..... | 16 | 1 | 16 | 24 | 2 | 26 | ..... | 13 |
| Totals..... | 800 | 26 | 826 | 352 | 4 | 356 | 108 | 10 | 118 | 1,280 | 40 | 1,300 | 211 | 795 |